

#5



1/41

FIGURE 1A

CATCATCAAT AATCTACAGT ACACTGATGG CAGCGGTCCA ACTGCCAATC ATTTTTGCCA	60
CGTCATTTAT GACGCAACGA CGGCGAGCGT GCGTGCTGA CGTAACTGTG GGGCGGAGCG	120
CGTCGCGGAG GCGGCGGCGC TGGGCGGGGC TGAGGGCGGC GGGGGCGGCG CGCGGGGCGG	180
CGCGCGGGGC GGGGCGAGGG GCGGAGTTCC GCACCCGCTA CGTCATTTTC AGACATTTT	240
TAGCAAATTT GCGCCTTTTG CAAGCATTTT TCTCACATTT CAGGTATTTA GAGGGCGGAT	300
TTTTGGTGTT CGTACTTCCG TGTCACATAG TTCCTGTCA ATCTTCATTA CGGCTTAGAC	360
AAATTTTCGG CGTCTTTTCC GGGTTTATGT CCCCAGTCC CTTTATGACT GTGTGAAACA	420
CACCTGCCCC TTGTTTACCC TTGGTCAGTT TTTTCGTCTC CTAGGGTGGG AACATCAAGA	480
ACAAATTTGC CGAGTAATTG TGCACCTTTT TCCGCGTTAG GACTGCGTTT CACACGTAGA	540
CAGACTTTTT CTCATTTTCT CACACTCCGT CGTCCGCTTC AGAGCTCTGC GTCTTCGCTG	600
CCACCATGAA GTACCTGGTC CTCGTTCTCA ACGACGGCAT GAGTCGAATT GAAAAAGCTC	660
TCCTGTGCAG CGATGGTGAG GTGGATTTAG AGTGTCATGA GGTACTTCCC CCTTCTCCCG	720
CGCCTGTCCC CGCTTCTGTG TCACCCGTGA GGAGTCCCTC TCCTCTGTCT CCGGTGTTTC	780
CTCCGTCTCC GCCAGCCCCG CTTGTGAATC CAGAGGCGAG TTCGCTGCTG CAGCAGTATC	840
GGAGAGAGCT GTTAGAGAGG AGCCTGCTCC GAACGGCCGA AGGTCAGCAG CGTGCACTGT	900
GTCCATGTGA GCGGTTGCCC GTGGAAGAGG ATGAGTGTCT GAATGCCGTA AATTGCTGT	960
TTCTGATCC CTGGCTAAAT GCAGCTGAAA ATGGGGGTGA TATTTTAAAG TCTCCGGCTA	1020
TGTCTCCAGA ACCGTGGATA GATTTGTCTA GCTACGATAG CGATGTAGAA GAGGTGACTA	1080
GTCATTTTT TCTGGATTGC CCTGAAGACC CCAGTCGGGA GTGTTTCTCT TGTGGGTTTC	1140
ATCAGGCTCA AAGCGGAATT CCAGGCATTA TGTGCAGTTT GTGCTACATG CGCCAAACCT	1200
ACCATGTCAT CTATAGTAAG TACATTCTGT AAAAGAACAT CTTGGTGATT TCTAGGTATT	1260
GTTTAGGGAT TAACTGGGTG GAGTGATCTT AATCCGGCAT AACCAAATAC ATGTTTTTAC	1320
AGGTCCAGTT TCTGAAGAGG AAATGTGAGT CATGTTGACT TTGGCGCGCA AGAGGAAATG	1380
TGAGTCATGT TGAATTTGGC GCGCCCTACG GTGACTTTAA AGCAATTTGA GGATCACTTT	1440
TTTGTTAGTC GCTATAAAGT AGTCACGGAG TCTTCATGGA TCACTTAAGC GTTCTTTTGG	1500
ATTTGAAGCT GCTTCGCTCT ATCGTAGCGG GGGCTTCAA TCGCACTGGA GTGTGGAAGA	1560
GGCGGCTGTG GCTGGGACGC CTGACTCAAC TGGTCCATGA TACCTGCGTA GAGAACGAGA	1620
GCATATTTCT CAATTCTCTG CCAGGGAATG AAGCTTTTTT AAGGTTGCTT CGGAGCGGCT	1680
ATTTTGAAGT GTTTGACGTG TTTGTGGTGC CTGAGCTGCA TCTGGACACT CCGGGTCGAG	1740
TGGTCGCCGC TCTTGCTCTG CTGGTGTTCA TCCTCAACGA TTTAGACGCT AATTCTGCTT	1800
CTTCAGGCTT TGATTCAGGT TTTCTCGTGG ACCGTCTCTG CGTGCCGCTA TGGCTGAAGG	1860

2/41

FIGURE 1B

CCAGGGCGTT	CAAGATCACC	CAGAGCTCCA	GGAGCACTTC	GCAGCCTTCC	TCGTCGCCCCG	1920
ACAAGACGAC	CCAGACTACC	AGCCAGTAGA	CGGGGACAGC	CCACCCCGGG	CTAGCCTGGA	1980
GGAGGCTGAA	CAGAGCAGCA	CTCGTTTCGA	GCACATCAGT	TACCGAGACG	TGGTGGATGA	2040
CTTCAATAGA	TGCCATGATG	TTTTTTATGA	GAGGTACAGT	TTTGAGGACA	TAAAGAGCTA	2100
CGAGGCTTTG	CCTGAGGACA	ATTTGGAGCA	GCTCATAGCT	ATGCATGCTA	AAATCAAGCT	2160
GCTGCCCCGT	CGGGAGTATG	AGTTGACTCA	ACCTTTGAAC	ATAACATCTT	GCGCCTATGT	2220
GCTCGGAAAT	GGGGCTACTA	TTAGGGTAAC	AGGGGAAGCC	TCCCCGGCTA	TTAGAGTGGG	2280
GGCCATGGCC	GTGGGTCCGT	GTGTAACAGG	AATGACTGGG	GTGACTTTTG	TGAATTGTAG	2340
GTTTGAGAGA	GAGTCAACAA	TTAGGGGGTC	CCTGATACGA	GCTTCAACTC	ACGTGCTGTT	2400
TCATGGCTGT	TATTTTATGG	GAATTATGGG	CACTTGTATT	GAGGTGGGGG	CGGGAGCTTA	2460
CATTCGGGGT	TGTGAGTTTG	TGGGCTGTTA	CCGGGGAATC	TGTTCTACTT	CTAACAGAGA	2520
TATTAAGGTG	AGGCAGTGCA	ACTTTGACAA	ATGCTTACTG	GGTATTACTT	GTAAGGGGGA	2580
CTATCGTCTT	TCGGGAAATG	TGTGTTCTGA	GACTTTCCTG	TTTGCTCATT	TAGAGGGAGA	2640
GGGTTTGTTT	AAAAACAACA	CAGTCAAGTC	CCCTAGTCGC	TGGACCAGCG	AGTCTGGCTT	2700
TTCCATGATA	ACTTGTGCAG	ACGGCAGGGT	TACGCCTTTG	GGTTCCCTCC	ACATTGTGGG	2760
CAACCGTTGT	AGGCGTTGGC	CAACCATGCA	GGGGAATGTG	TTTATCATGT	CTAAACTGTA	2820
TCTGGGCAAC	AGAATAGGGA	CTGTAGCOCT	GCCCCAGTGT	GCTTTCTACA	AGTCCAGCAT	2880
TTGTTTGAG	GAGAGGGCGA	CAAACAAGCT	GGTCTTGGCT	TGTGCTTTTG	AGAATAATGT	2940
ACTGGTGTAC	AAAGTGCTGA	GACGGGAGAG	TCCCTCAACC	GTGAAATGT	GTGTTTGTGG	3000
GACTTCTCAT	TATGCAAAGC	CTTTGACACT	GGCAATTATT	TCTTCAGATA	TTGGGGCTAA	3060
TCGATACATG	TACACTGTGG	ACTCAACAGA	GTTCACTTCT	GACGAGGATT	AAAAGTGGGC	3120
GGGGCCAAGA	GGGGTATAAA	TAGGTGGGGA	GGTTGAGGGG	AGCCGTAGTT	TCTGTTTTTC	3180
CCAGACTGGG	GGGGACAACA	TGGCCGAGGA	AGGGCGCATT	TATGTGCOCT	ATGTAACCTGC	3240
CCGCCTGCCC	AAGTGGTCGG	GTTCGGTGCA	GGATAAGACG	GGCTCGAACA	TGTTGGGGGG	3300
TGTGGTACTC	CCTCCTAATT	CACAGGCGCA	CCGGACGGAG	ACCGTGGGCA	CTGAGGCCAC	3360
CAGAGACAAC	CTGCACGCCG	AGGGAGCGCG	TCGTCTGAG	GATCAGACGC	CCTACATGAT	3420
CTTGGTGGAG	GACTCTCTGG	GAGGTTTGAA	GAGGCGAATG	GACTTGCTGG	AAGAATCTAA	3480
TCAGCAGCTG	CTGGCAACTC	TCAACCGTCT	CCGTACAGGA	CTCGCTGCCT	ATGTGCAGGC	3540
TAACCTTGTG	GGCGGCCAAG	TTAACCCTT	TGTTTAAATA	AAAATACACT	CATACAGTTT	3600
ATTATGCTGT	CAATAAAATT	CTTTATTTTT	CCTGTGATAA	TACCGTGTCC	AGCGTGCTCT	3660

3/41

FIGURE 1C

GTCAATAAGG	GTCCTATGCA	TCCTGAGAAG	GGCCTCATAT	ACCATGGCAT	GAATATTAAG	3720
ATACATGGGC	ATAAGGCCCT	CAGAAGGGTT	GAGGTAGAGC	CACTGCAGAC	TTTCGTGGGG	3780
AGGTAAGGTG	TTGTAAATAA	TCCAGTCATA	CTGACTGTGC	TGGGCGTGGA	AGGAAAAGAT	3840
GTCTTTTAGA	AGAAGGGTGA	TTGGCAAAGG	GAGGCTCTTA	GTGTAGGTAT	TGATAAATCT	3900
G TTCAGTTGG	GAGGGATGCA	TTCGGGGGCT	AATAAGGTGG	AGTTTAGCCT	GAATCTTAAG	3960
GTTGGCAATG	TTGCCCCCTA	GGTCTTTGCG	AGGATTCATG	TTGTGCAGTA	CCACAAAAAC	4020
AGAGTAGCCT	GTGCATTTGG	GGAATTTATC	ATGAAGCTTG	GAGGGGAAGG	CATGAAAAAA	4080
TTTTGAGATG	GCTTTATGGC	GCCCCAGGTC	TTCCATGCAT	TCGTCCATAA	TAATAGCAAT	4140
AGGCCCGGTT	TTGGCTGCCT	GGGCAAACAC	GTTCTGAGGG	TGGGCGACAT	CATAGTTGTA	4200
GTCCATGGTC	AGGTCTTCAT	AGGACATGAT	CTTAAAGGCA	GGTTTTAGGG	TGCTGCTTTG	4260
AGGAACCAGA	GTTCTGTGG	GGCCGGGGGT	G TAGTTCCCT	TCACAGATTT	GGGTCTCCCA	4320
AGCAAGCAGT	TCTTGCGGGG	GTATCATGTC	AACTTGGGGG	ACTATAAAAA	AAACAGTTTC	4380
GGGAGGTGGT	TGAATGAGGC	CCGTAGACAT	AAGGTTTCTG	AGGAGCTGGG	ATTTTCCACA	4440
ACCGGTTGGT	CCGTAGACCA	CCCCAATAAC	GGGTTGCATG	GTAAAGTTTA	AAGATTTGCA	4500
TGAACCGTCA	GGGCGCAGAT	ATGGCATGGT	GGCATTTCATG	GCATCTCTTA	TCGCCTGATT	4560
ATAGTCTGAG	AGGGCATTGA	G TAGGGTGGC	GCCCCCATA	GCCAGTAGCT	CGTCCAAGGA	4620
AGAAAAGTGT	CTAAGAGGTT	TGAGGCCTTC	AGCCATGGGC	ATGGACTCTA	AGCACTGTTG	4680
CATGAGAGCA	CATTTGTCCC	AAAGCTCAGA	GACGTGGTCT	AGTACATCTC	CATCCAGCAT	4740
AGCTCTTTGT	TTCTTGGGTT	GGGGTGGCTG	TTGCTGTAGG	GGGCGAGACG	GTGACGGTCG	4800
ATGGCCCGCA	GGGTGCGGTC	TTTCCAGGGC	CTGAGCGTCC	TCGCCAGGGT	CGTCTCGGTG	4860
AOCGTGAAGG	GCTGCTGATG	CGTCTGTCTG	CTGACCAGCG	AGCGCCTCAG	GCTGAGCCTG	4920
CTGGTGOOGA	ACTTTTCTGT	GCCTAGCTGT	TCAGTGGAAAT	AATAACAAGT	CACCAGAAGG	4980
TCGTAGGAGA	GTTGTGAGGT	GGCATGGCCT	TTGCTCGAAG	TTTGCCAGAA	CTCTCGGCGG	5040
CGGCAGCTTG	GGCAGTAGAT	GTTTTTAAGG	GCATATAGTT	TGGGGGCTAA	GAAGACAGAT	5100
TCCTGGCTGT	GGGCGTCTCC	GTGGCAGCGG	GGGCACTGGG	TCTCGCATTC	CACAAGCCAA	5160
GTCAGCTGAG	GGTTGGTGGG	ATCAAAGACC	AGAGGACGGT	TATTACCTTT	CAGGCGGTGC	5220
TTGOCTCGGG	TGTCCATGAG	TTCTTTTCCC	CTTTGGGTGA	GAAACATGCT	GTCCGTGTCT	5280
CCGTAGACAA	ATTTGAGAAT	CCGGTCTTCT	AGGGGAGTGC	CTCTGTCTTC	TAAATAGAGG	5340
ATGTCTGCCC	ATTCAGAGAC	AAAGGCTCTA	GTCCACGCGA	GGACAAATGA	AGCTATGTGT	5400
GAGGGGTATC	TGTTATTAAA	TATGAGAGAG	GATTTTTTTT	GCAAAGTATG	CAGGCACAGG	5460
GCTGAGTCAT	CAGCTTCCAG	AAAGGTGATT	GGTTTGTAAG	TGTATGTCAC	GTGATGGTTC	5520

4/41

FIGURE 1D

TGGGGGTCTC	CCAGGGTATA	AAAGGGGGCG	TCTTCGTCTG	AGGAGCTATT	GCTAGTGGGT	5580
GTGCACTGAC	GGTGCTTCCG	CGTGGCATCC	GTTTGCTGCT	TGACGGGTGA	GTAGGTGATT	5640
TTTAGCTCTG	CCATGACAGA	GGAGCTCAGG	TTGTCACTTT	CCACGAAGGC	GGTGCTTTTG	5700
ATGTCGTAGG	TGCCGTCTGA	AATGCCTCTA	ACATATTTGT	CTTCCATTTG	GTCAGAAAAG	5760
ACAGTGACTC	TGTTGTCTAG	CTTAGTGGCA	AAGCTGCCAT	ACAGGGCATT	GGACAGCAGT	5820
TTGGCAATGC	TTCTGAGAGT	TTGGTTTTTC	TCTTTATCCG	CCCTTTCCTT	GGGCGCAATG	5880
TTAAGTTGCA	CGTAGTCTCT	AGCCAGACAC	TCCCACTGGG	GAAATACTGT	GGTGCGGGGG	5940
TCGTTGAGAA	TTTGGACTCT	CCAGCCGCGG	TTATGAAGCG	TGATGGCATC	CAAACAAGTT	6000
ACCCTTCCC	CCCGTAGTGT	CTCGTTGGTC	CAGCAGAGGC	GACCTCCTTT	TCTGGAGCAG	6060
AAGGGCGGTA	TAACGTCCAA	GAATGCTTCT	GGGGGTGGGT	CTGCATCAAT	GGTGAATATC	6120
GCGGGCAGTA	GGGTGCGATC	AAAATAGTCA	ATGGGTCTGT	GCAACTGGGT	TAGGCGGTCT	6180
TGCCAGTTTT	TAATTGCAAG	CGCTCGATCA	AAGGGGTTCA	AAGGTTTTCC	CGCTGGGAAA	6240
GGATGGGTGA	GGGCGCTGGC	ATACATGCCG	CAGATGTCAT	ACACATAGAT	GGCTTCTGTT	6300
AGGACGCTTA	TGTAGGTAGG	ATAGCATCGG	CCGCCCCGAA	TACTTTCTCT	AACGTAATCA	6360
TACATTTTCT	TGGAAGGGGC	TAGTAGAAAG	TTGCCAGAG	AGCTCCTGTT	GGGACGCTGG	6420
GATCGGTAGA	CTACCTGTCT	GAAGATGGCA	TGGGAATTGG	AGCTGATGGT	GGGCCTTTGG	6480
AGGACATTGA	AATTGCAGTG	GGGCAGCCCC	ACTGACGTGT	GAACAAAGTC	CAAATAAGAT	6540
GCTTGGAGTT	TTTTAACCAA	TTCGGCCGTA	ACCAGCACGT	CCATAGCACA	GTAGTCCAAG	6600
GTGCGTTGCA	CAATATCATA	GGCACCTGAA	TTCTCTTGCA	GCCAGAGACT	CTTATTGAGA	6660
AGGTACTOCT	CGTCGCTGGA	CCAGTAGTCC	CTCTGAGGAA	AAGAATCTGC	GTCGGTTCCG	6720
TAGGTACCTA	ACATGTAAAA	TTCATTTACA	GCTTTGTAAG	GGCAGCAGCC	TTTTTCCACG	6780
GGTAAAGCGT	AAGCGGCAGC	TGCGTTCCTG	AGACTCGTGT	GCGTGAGAGC	AAAGGTATCT	6840
CGGACCATGA	ACTTCACAAA	CTGAAATTTA	TAGTCTGCTG	AGGTGGGAGT	GOCTTCTCTC	6900
CAGTCTTTGA	AGTCTTTTTC	AGCAGCATGT	GTGGGGTTAG	GCAGAGCAAA	AGTTAAGTCA	6960
TTGAAAAGAA	TCTTGCCACA	ACGAGGCATG	AAATTTCTAC	TGACTTTAAA	AGCAGCTGGA	7020
ATACCTTGTT	TGTTGTTAAT	GACTTGTGCG	GCTAGAACAA	TCTCATCAAA	GCCGTTTATG	7080
TTGTGCCCTA	CGACATAGAC	TTCCAAGAAA	GTCGGTTGOC	CTTTGAGTTC	AAGCGTACAC	7140
AGTTCCTCGA	AAGGAATGTC	GCTGGCATGG	ACATAGCCCA	GTTTGAGGCA	GAGGTTTTCT	7200
AAGCACGGAT	TATCTGCCAG	GAAGTGGCGC	CAAAGCAAAG	TGCTGGCAGC	TTCTTGAAGG	7260
GCATCCCGAT	ACTGTTTAAA	CAAGCTGCCT	ACTTTGTTTC	TTTGCGGGTT	GAGGTAGTAG	7320

5/41

FIGURE 1E

AAGGTATTTG	CTTGCTTTGG	CCAGCTTGAC	CACTTTTGCT	TTTtagctat	GTTAACAGCC	7380
TGTTTCGCATA	GCTGCGCGTC	ACCAAACAAA	GTAAACACGA	GCATAAAAGG	CATGAGTTGC	7440
TTGCCAAAGC	TACCGTGCCA	AGTGTATGTT	TCCACATCAT	AGACGACAAA	GAGGCGCCGG	7500
GTGTCGGGGT	GAGCGGCCCCA	GGGGA AAAAC	TTTATTTCTT	CCCACCAGTC	CGAAGATTGG	7560
GTGTTTATGT	GGTGAAAGTA	AAAGTCCCGG	CGGCGAGTGC	TGCAGGTGTG	CGTCTGCTTA	7620
AAATACGAAC	CGCAGTCGGC	ACATCGCTGG	ACCTCTGCGA	TGGTGTCTAT	GAGATAGAGC	7680
TTTCTCTTGT	GAATAAGAAA	GTTGAGGGGG	AAGGGAAGGC	GCGGCCTGTC	AGCGCGGGCC	7740
GGGATGCTTG	TAATTTTCAG	CTTCCCCTTG	TATGTTTTGT	AAACGCACAT	ATTTGCGTTG	7800
CAGAACCGGA	CGAGCGTGTC	TTGGAATGAA	AGGATATTTT	CTGGTTTTAA	ATCAAATGGG	7860
CAGTGCTCCA	AGTGCAGTTC	AAAAAGGTTT	CGGAGACTGC	TGGAAACGTC	TGCGTGATAC	7920
TTGACTTCCA	GGGTGGTCCC	GTCTTCAGTC	TGACCGTGCA	GCCGTAGGGT	ACTGCGTTTG	7980
GCGACCAGGG	GCCCCCTTGG	GGCTTTCTTT	AAAGGGGACG	TCGAGGGCCG	AGGGGCGGCC	8040
TTTGCCTTTC	GGGCTGAGG	GGCGGTAGCT	GGACCGGATC	GTTGAGTTGG	GGCATGGGTT	8100
GCAGCTGTTG	GCGCAGGTCT	GATGCGTGCT	GCACGACTCT	GCGGTTGATT	CTCTGAATCT	8160
CCGGGTGTTG	GGTGAATGCT	ACTGGCCCCG	TCACTTTGAA	CCTGAAAGAG	AGGTCGACAG	8220
AGTTAATAGA	TGCATCGTTA	AGCTCCGCTT	GTCTAATAAT	TTCTTCCACG	TCACCGCTGT	8280
GGTCTCGGTA	AGCAATGTCT	GTCATAAACC	GTTGATCTC	TTCTCTGTCC	AGTTCTCCGC	8340
GACCAGCTCG	GTGGACCGTG	GCTGCCAAGT	CCGTGCTAAT	GCGTCGCATG	AGCTGGGAAA	8400
AGGCATTGGT	TCCCGGTTCA	TTCCACACTC	TGCTGTATAT	AACAGCGCCA	TCTTCGTCTC	8460
GGGCTCGCAT	GACCACCTGG	CCCAAGTTTA	GCTCCACGTG	GCGAGCAAAG	ACGGGGCTGA	8520
GGCGGAGGTG	GTGGTGCAAG	TAATTGAGAG	TGGTGGCTAT	GTGCTCCACG	ATGAAGAAGT	8580
AGATGACCCA	TCTGCGGATG	GTCGACTCGT	TAATGTTGCC	CTCTCGCTCC	AGCATGTTTA	8640
TGGCTTCGTA	AAAGTCCACA	GCGAAGTTAA	AAAAGTCTC	GTTGCGGGCG	GAGACTGTCA	8700
GCTCTTCTTG	CAGGAGACGA	ATGACTTCGG	CTACGGCGGC	GCGGACTTCT	TCGGCAAAGG	8760
AGCGGGGGCG	CACGTCTCTC	TCTCTCTCTT	CTTCCCCCTC	CAGCGGGGGC	ATCTCCAGCT	8820
CTACCGGTTT	CGGGCTGGGG	GACAGGGAAG	GCGGTGCGGG	CCGAACGACC	CGTCGGCGTC	8880
GGGTGGGCAA	GGGGAGACTC	TCTATGAATC	GCTGCACCAT	CTCGCCCCGG	CGTATCCGCA	8940
TCTCTGCGGT	AACGGCACGC	CCGTGTTCTC	GGGGTCGGAG	CTCAAAGCT	CCGCCCCGCA	9000
GTTGCGGTCAG	AGGCCGCGCC	GCGGGCTGGG	GCAGGCTGAG	TGCGTCAATA	ACATGCGCCA	9060
CCACTCTCTC	CGTAGAGGCG	GCTGTTTCTG	ACCGAAGAGA	CTGAGCATCC	ACGGGATCGC	9120
TGAAGCGTTG	CACAAAAGCT	TCTAACCAGT	CGCAGTCACA	AGGTAGGCTG	AGCATAGGTG	9180

6/41

FIGURE 1F

AGGCTCGCTC	GGTGTGTTT	CTGTTTGGCG	GCGGGTGGCT	GAGGAGAAAA	TTAAAGTACG	9240
CGCACCGCAG	GCGCCGGATG	GTTGTCAGTA	TGATGAGATC	CCTGCGACCC	GCTTGTGGA	9300
TTCTGATGCG	GTTTGCAAAG	CCCCAGGCTT	GGTCTTGGA	TCGCCCAGGT	TCATGCACTG	9360
TTCTTGAGG	AATCTCTCTA	CGGGCACGTT	GCGGCGCTGC	GGGGGCAGGG	TCAGCCATTT	9420
CGGTGCGTCC	AAACCCACGC	AATGGTTGGA	TGAGAGCCAA	GTCCGCTACT	ACGCGCTCTG	9480
CTAGGACGGC	TTGCTGGATC	TGCCGCAGCG	TTTCATCAAA	GTTTTCCAAG	TCAATGAAGC	9540
GGTCGTAGGG	GCCCCGTTTT	ATGGTGTAGG	AGCAGTTTGC	CATGGTGGAC	CAGTCCACAA	9600
TCTGCTGATC	TACCCGCACC	GTTTCTCGGT	ACACCAGTCG	GCTATAGGCT	CGCGTCTCGA	9660
AAACATAGTC	GTTGCAAACG	CGCACCACTG	ATTGGTAGCC	GATTAGGAAG	TGCGGCGGCG	9720
GGTATAAGTA	GAGCGGCCAG	TTTTGCGTGG	CCGGCTGTCT	GGCGCCAGCA	TTCCGTAGCA	9780
TGAGTGTGGG	GTATCGGTAC	ACGTGACGCG	ACATCCAGGA	GATGCCCGCG	GCCGAAATGG	9840
CGGCCCTGGC	GTAATCCCGG	GCCCCGTTCC	ATATATTCCT	GAGAGGACGA	AAGATTCCAT	9900
GGTGTGCAGG	GTCTGCCCCG	TAAGACGCGC	GCAATCTCTC	GCGCTCTGCA	AAAAACATAC	9960
AGATGAAACA	TTTTTTGGGGC	TTTTTCAGATG	ATGCATCCCG	CTTTACGGCA	AATGAAGCCC	10020
AGATCCGCGG	CAGTGGCGGG	GGTTCTTGCT	GCGGCCGCGG	GCGCGAGCGT	TGACTCAGGC	10080
GGTACTAOCG	CGCCCCCTGG	TGTCGAGTGC	GGCGAGGGGG	AAGGGTTAGC	TCGGCTGTAC	10140
GCGCAOCCGG	ACACACACCC	GCGCGTGTGC	GTGAAGCGCG	ATGOGGCGGA	GGCGTACGTT	10200
CCCCGGGAGA	ACTTATTCOG	CGACCGCAGC	GGGGAGGAAC	CCGAAGGGAG	CCGAGACCTA	10260
AAGTACAAGG	CCGGTCGGCA	GTTGCGCGCC	GGCATGCCCC	GAAAGCGGGT	GCTGACCGAA	10320
GGGGACTTTG	AGGTGGATGA	GCGCACTGGC	ATCAGCTCAG	CCAAAGCCCA	CATGGAGGCG	10380
GOCGATCTAG	TGCGGGCTTA	CGAGCAAACG	GTGAAGCAAG	AGGCTAATTT	TCAAAAGTCA	10440
TTTAATAACC	ACGTGCGGAC	ACTGATCTCC	OGCGAGGAGA	CCACCTGGG	TTTGATGCAC	10500
TTGTGGGACT	TTGCGGAGGC	ATACGCGCAG	AACCCCGGCA	GCAAGACCCT	TACGGCCCAA	10560
GTCTTTCTCA	TCGTGCAGCA	CTTGCAAGAT	GAGGGCATT	TTGGGGAAGC	TTTCTTAAGC	10620
ATAGCAGAGC	CCGAGGGACG	ATGGATGCTA	GATCTGCTAA	ACATATTGCA	GTCCATTGTG	10680
GTGCAAGAGC	GCCAGCTTTC	GCTATCTGAA	AAGGTAGCCG	CGGTGAACTA	CTCCGTAGTT	10740
ACCCTGGGCA	AACATTATGC	CCGCAAGATC	TTTAAGAGCC	OCTTTGTGCC	GCTTGACAAG	10800
GAGGTGAAGA	TCAGTACATT	TTATATGCGC	GCGGTGCTTA	AGGTCTGGG	TCTAAGTCAC	10860
GACCTGGGCA	TGTACAGAAA	CGAAAAGGTG	GAGAAGCTAG	CTAGCATAGG	CAGGCGTTTCG	10920
GGAGATGAGC	GACGCGGAGC	TGCTGTTCAA	CCTCCGCCGC	GCACTAACCA	CTGGCGATT	10980

7/41

FIGURE 1G

TGAAGCATTC	GATGAAGGCG	GGGACTTTAC	CTGGGCTCCG	CCAACTCGCG	CGACCGCGGC	11040
GGCCGCTTTG	CCGGGGCCCCG	AGTTTGAGAG	TGAAGAGACG	GACGATGAAG	TCGACGAATG	11100
AGTGATGCGG	ACCCCCGTAT	CTTTCAGCTG	GTCAGTCGGC	AAGAGACCGT	AGCCATGGCC	11160
GAAGCGCCCC	GAAGCCTGGG	CCCCGCCCCCT	TCCAATCCTA	GTTTGCAGGC	TTTATTCCAA	11220
AGCCAGCCCA	GCGCCGAGCA	GGAGTGGCAC	GGCGTGCTGG	AGAGAGTCAT	GGCCCTTAAC	11280
AAAAATGGAG	ACTTTGGCTC	GCAGCCCCAG	GCGAACCGGT	TTGGAGCCAT	CCTCGAAGCC	11340
GTGGTGCCCC	CGCGCTCCGA	TCCCACCCAT	GAAAAAGTGC	TAGCTATTGT	GAATGCGCTC	11400
TTGGAGACTC	AGGCCATCCG	TCGCGATGAG	GCCGGACAGA	TGTACACCGC	GCTGTTGCAG	11460
CGGGTGGCCA	GATACAACAG	TGTGAATGTG	CAGGGCAATT	TGGACAGGCT	GATTCAGGAC	11520
GTGAAGGAGG	CTCTGGCGCA	GCGCGAGCGC	ACCGGGCCGG	GGGCCGGCCT	AGGGTCTGTG	11580
GTAGCCTTGA	ATGCCTTCCT	GAGCACACAG	CCAGCGGTGG	TGGAGAGGGG	CCAGGAGAAC	11640
TATGTGGCCT	TTGTGAGCGC	CTTAAAACTC	ATGGTGACCG	AGGCGCCGCA	GTCTGAGGTT	11700
TACCAGGCCG	GACCTAGTTT	CTTTTTTCAA	ACCAGCCGGC	ACGGTTCGCA	GACGGTAAAC	11760
CTCAGTCAGG	CCTTTGATAA	CTTGCGACCC	CTCTGGGGCG	TGCGCGCGCC	AGTACACGAG	11820
CGTACTACCA	TCTCCTCTCT	GCTCACACCA	AACACCCGCT	TGCTCTTGCT	CCTCATTGCG	11880
CCCTTTACGG	ACAGCGTGGG	CATATCCCGG	GACAGTTACC	TGGGGCATCT	GCTGACCCTT	11940
TACCGGGAGA	CCATAGGTAA	CACTCGAGTT	GATGAGACCA	CGTACAACGA	GATCACGGAA	12000
GTGAGTCGGG	CCCTGGGGCG	CGAAGACGCG	TCTAACTTGC	AAGCCACTCT	CAACTACTTA	12060
CTCACAAATA	AGCAGAGCAA	GTTGCCACAG	GAGTTTTCTC	TGAGTCCCGA	AGAGGAGCGG	12120
GTGCTGCGCT	ACGTGCAGCA	ATCTGTCACT	TTATTTTTAA	TGCAGGATGG	ACACACGGCC	12180
ACCACTGCTC	TAGATCAGGC	TGCGGCCAAC	ATAGCGCCCT	CGTTTTACGC	GTCCACCGC	12240
GACTTTATAA	ACCGACTGAT	GGACTATTTT	CAGCGAGCTG	CGGCTATGGC	COCTGACTAC	12300
TTTTTACAGG	CTGTTATGAA	TCCCCACTGG	CTCCCGCCGC	CGGGTTTCTT	TACTCAGGAG	12360
TTTGACTTTC	CGGAGCCCCA	CGGAGGCTTC	CTGTGGGATG	ATTTGGACAG	CGCGCTCCTA	12420
CGCGCGCACG	TAAAAGAAGA	GGAGGATCAA	GGAGCTGTGG	GCGGCACGCC	GGCGGCTTCG	12480
GCGCCCGCGT	CTCGCGCGCA	CACACCACCG	CGCGCGCCCG	GTGCGCGGGA	CCTCTTTGCT	12540
OCTAACGCCT	TCCGCAATGT	GCAAAATAAC	GGCGTGGATG	AACTTATTGA	CGGCTTAAGC	12600
AGATGGAAGA	CTTACGCCCA	GGAGAGGCAG	GAAGTCGTTG	AGCGGCACAG	GCGCAGAGAG	12660
GCGCGTCGCC	GGGCGCGCGA	GGCGCGTCTA	GAGTOGAGCG	ATGATGACGA	CAGCGACCTA	12720
GGGCCGTTTC	TACGGGGCAC	GGGGCACCTC	GTTCAACAAC	AGTTTATGCA	TCTGAAGCCC	12780
CGGGGTCCCC	GCCAGTTTTG	GTAACCGCAC	TGTATTAAGC	TGTAAGTCCT	CTCATTTGAC	12840

8/41

FIGURE 1H

ACTTACCAAA	GCCATGGTCT	TGCTTCGCCT	CTGACACTTT	CTCTCCCCC	ACACGCGGCA	12900
CCCTACAGCC	TAGGGGCGAT	GCTCCAGCCC	GAACTGCAGC	CAATTCCGCT	GTCCCGCCGC	12960
CGGCTTATGA	GGCGGTGGTG	GCTGGGGCCT	TCCAGACGCT	TTCTCTTCGA	CGAGATCCAC	13020
GTCCCGCCGC	GATATGCTGC	CGCGTCTGCG	GGGAGAAACA	GTATCCGTTA	TTCCATGCTG	13080
CCCCCGTTGT	ATGACACCAC	GAAGATATAC	CTTATCGACA	ACAAATCTTC	AGACATCCAA	13140
ACTCTGAATT	ACCAAAACGA	CCACTCAGAT	TACCTCACTA	CCATCGTGCA	GAACAGCGAC	13200
TTCACGCCCC	TGGAGGCTAG	CAACCACAGC	ATCGAGCTAG	ACGAGCGGTC	CCGCTGGGGC	13260
GGAAACCTTA	AAACCATCCT	TTATACAAAC	CTGCCTAATA	TCACCCAGCA	CATGTTTTCT	13320
AACTCTTTTC	GGGTAAAGAT	GATGGCCTCA	AAAAAAGACG	GCGTGCCCCA	GTACGAGTGG	13380
TTCCCCCTAA	GGCTGCCCGA	GGGTAACTTT	TCTGAGACTA	TGGTCATTGA	CCTCATGAAC	13440
AATGCCATCG	TAGAGCTGTA	CTTGCTTTTG	GGGCGCCAGG	AGGGCGTGAA	GGAAGAGGAC	13500
ATCGGGGTAA	AGATCGATAC	GCGCAACTTT	AGTCTGGGCT	ATGACCCGCA	GACCCAGTTA	13560
GTGACGCCCC	GCGTATACAC	CAATGAAGCT	ATGCATGCGG	ACATCGTGTT	GCTGCGGGC	13620
TGTGCTATAG	ACTTTACGCA	CTCCCGATTA	AACAACCTCT	TGGGCATACG	CAAGCGTTTT	13680
CCGTACCAAG	AGGGCTTCGT	CATCTCCTAT	GAGGACCTTA	AGGGGGGTAA	CATCCCCGCT	13740
TTGATGGACG	TGGAGGAGTT	TAACAAGAGC	AAGACGGTTC	GAGCTTTGCG	GGAGGACCCC	13800
AAGGGGCGCA	GTTATCACGT	GGGCGAAGAC	CCAGAAGCCA	GAGAAAACGA	AACCGCCTAC	13860
CGCAGCTGGT	AOCTGGCTTA	CAATTACGGG	GACCCAGAAA	AAGGGGTGCG	GGCCACCACA	13920
CTGCTGACTA	CCGGCGACGT	GACCTGCGGG	GTGGAACAGA	TCTACTGGAG	CTTGCCGGAC	13980
ATGGCACTGG	ACCCAGTCAC	.TTTCAAGGCT	TOGCTGAAAA	CTAGCAATTA	CCCCGTGGTG	14040
GGCACAGAAC	TTTTGCCACT	GGTGCCGGGT	AGCTTTTATA	ACGCTCAGGC	TGTGTACTCA	14100
CAGTGGATAC	AAGAAAAAAC	TAACCAGACC	CACGTTTTCA	ATCGCTTTCC	CGAAAATCAG	14160
ATC1TGGTGC	GGCCCCCTGC	GOCTACCATC	ACGTCCATAA	GTGAAAATAA	GCCCAGCTTG	14220
ACAGATCACG	GAATCGTGCC	GCTCOGGAAC	CGCTTGGGGG	GCGTGCAACG	TGTGACTTTG	14280
ACTGACGCGC	GGCGAAGATC	CTGCCCCTAC	GTCTACAAGA	GCTTAGGCAT	TGTGACCCG	14340
CAAGTGCTAT	CTAGCCGCAC	GTTTTAAGCA	GACAGGGGCA	CAGCAGCCGT	TTTTTTTTTT	14400
TTTTTTTCGC	TCCACCAGGG	ACTGTCAGGA	ACATGGCCAT	TCTAATCTCT	CCTAGCAATA	14460
ACACGGGCTG	GGGCCTGGGA	TGCAATAAGA	TGTACGGGGG	CGCTCGCATA	CGTTCAGACT	14520
TGCATCCAGT	GAAGGTGCGG	TCGCATTATC	GGGCCGCGTG	GGGCAGCCGC	ACCGGTGCGG	14580
TGGGTCGCCG	CGCAACCGCA	GCTTTAGCCG	ATGCCGTGCG	GGCCACCGGT	GATCCGGTGG	14640

9/41

FIGURE 11

CCGACACAAT	CGAGGCGGTG	GTGGCTGACG	CCCGCCAGTA	CCGGCGCCGC	AGACGGCGAG	14700
GGGTGCGCCG	AGTCAGAAGG	TTGCGTCGGA	GCCCCCGCAC	TGCCCTGCAG	CGACGGGTTC	14760
GTAGCGTACG	CCGACAAGTG	GCGAGGGCCC	GCAGGGTGGG	CCGGCGCGCG	GCCGCTATCG	14820
CAGCAGACGC	GGCCATGGCC	ATGGCGGCGC	CAGCTCGGCG	ACGCCGTAAC	ATCTACTGGG	14880
TACGCGATGC	GGCAACCGGA	GCCCGCGTTC	CGGTGACAAC	CCGGCCTACG	GTCAGCAACA	14940
CCGTTTGAAA	TGTCTGCTAC	TTTTTTTTGC	TTCAATAAAA	GCCCCCGGAC	TGATCAGCCA	15000
CACCTTGTCA	CGCAGAATTC	TTTCAAACCA	TTGCGCTCTC	AGCGCGCGCG	CCGATAAACC	15060
CACTGTGATG	GCCTCCTCTC	GGTTGATTAA	AGAAGAAATG	TTAGACATCG	TGGCGCCTGA	15120
GATTTACAAG	CGCAAACGGC	CCAGGCGAGA	ACGCGCAGCA	CCGTATGCTG	TGAAGCAGGA	15180
GGAGAAGCCT	TTAGTAAAGG	CGGAGCGCAA	AATTAAGCGC	GGCTCCAGAA	AGCGGGCCTT	15240
GTCAGGCGTT	GACGTTCCCTC	TGCCCCGATGA	CGGCTTTGAG	GACGACGAGC	CCCACATAGA	15300
ATTTGTGTCT	GCGCCGCGTC	GGCCCTACCA	GTGGAAGGGC	AGGCGGGTGC	GCCGGGTTTT	15360
GCGTCCCGGC	GTGGCCGTTA	GTTTCACGCC	CGGCGCGCGC	TCCCTCCGTC	CGAGTTCCAA	15420
GCGGGTGTAT	GACGAGGTGT	ACGCAGACGA	CGACTTCTTA	GAAGCGGCCG	CGGCCCGTGA	15480
GGGGGAGTTT	GCTTACGGAA	AGCGGGGACG	CGAGGCGGCC	CAGGCCCGAGC	TGCTACCGGC	15540
TGTGGCCGTG	CCGGAACCGA	CTTACGTAGT	TTTGGATGAG	AGCAACCCCA	CCCCGAGCTA	15600
CAAGCCTGTA	ACCGAGCAGA	AAGTTATTCT	TTCCCGCAAG	CGGGGTGTGG	GGAAGGTAGA	15660
GCCTACCATC	CAGGTTTTAG	CTAGCAAGAA	GCGGCGCATG	GCCGAGAATG	AGGATGACCG	15720
CGGGGCCGGC	TCCGTGGCCG	AAGTGCAGAT	GCGAGAAGTT	AAACCGGTAA	CCGCTGCCTT	15780
GGGTATTGAG	ACCGTGGATG	TTAGCGTGCC	CGACCACAGC	ACTCCCATGG	AGGTGCTGCA	15840
GAGTCTCAGT	CGGGCGGCTC	AAGTAGCTCA	AOGCCTGACC	CAACAACAGG	TGCGGCCCTC	15900
GGCTAAGATT	AAAGTGGAGG	CCATGGATCT	TTCTGCTCCG	GTAGACGCAA	AGCCTCTTGA	15960
CTTAAAACCC	GTGGACGTAA	AGCCGACCCC	GACCTTCGTG	CTTCCAGCT	TTGTTTCACT	16020
CAGCACCCAA	ACTGACTCTT	TGCCCCGGGC	AGTGGTGTG	CCGCGCAAGC	CCCGCGTGCA	16080
CCGTGCTACT	AGGCGTACTG	CGCGCGGCTT	GCTGCCCTAT	TACCGCCTGC	ATCCTAGCAT	16140
CACGCCGACA	CCGGGTTACC	GAGGATCTGT	CTACACGAGC	TGGGGTGTGC	GCCTGCCCGC	16200
CGTCCGGGGG	CCGCGTCCG	CGCCGTACCC	GCAGGGCGAC	TCCCCGCTC	AGCGCTGCCG	16260
CGGCCGCGGC	GCTGCTGCCC	GGCGTGCGCT	ATCACCCTAG	CATCCGCCAA	GCGGCCACAG	16320
TAACCCGGCT	CCGCCGTTAA	GCGCTGTGAA	ACTGCAACAA	CAACAACAAA	AATAAAAAAA	16380
AGTCTCCGCT	OCACTGTGCA	CCGTTGTCCA	TGGGCTAATA	AAGTCCCGCT	TTGTGCGCCG	16440
CAGGAACCAC	TATCCGTAAC	CTGCGAAAAT	GAGTCCCGCG	GGAAATCTGA	CTTACAGACT	16500

10/41

FIGURE 1J

GAGAATACCG	GTGCGCCTCA	GTGGCCGGCG	CCGGCGCCGA	ACAGGCTTGC	GAGGAGGGTC	16560
TGCGTACCTG	CTCGGCCGCC	GCAGAAGGCG	CGCGGGCGGC	GGCCGCCTGC	GCGGGGGCTT	16620
CCTTCCCCTC	CTGGCTCCCA	TCATTGCAGC	CGCCATCGGC	GCAATCCCCG	GCATCGCATC	16680
AGTGGCCATT	CAGGCGGCCC	ACAACAAATA	GGGACAGTGT	AAAGAAAGCT	CAATCTCAAT	16740
AAAACAAACC	GCTCGATGTG	CATAACGCTC	TCGGCCTGCA	ACTTCTGCTG	CTTACGTCTT	16800
TGACCAAAGT	CACTACTGTT	TTCCTTTTAC	CCAGAGCCGG	CGCCAGCCCC	ACACAGCTTG	16860
TTAACACGCC	ATGGACGAAT	ACAATTACGC	GGCTCTTGCT	CCCCGGCAAG	GCTCCCGACC	16920
CATGCTGAGC	CAGTGGTCCG	GCATCGGCAC	GCACGAAATG	CACGGCGGAC	GTTTAAATCT	16980
GGGCAGTTTG	TGGAGCGGGA	TCAGGAATGT	GGGCAGCGCG	TTAAGAACTG	GGGCTCTCGG	17040
GCCTGGCACA	GCAATGCGGG	CAAGCGTTGC	GCGCCCAGCT	GAAAAAGACG	GGCTTGCAAG	17100
AAAAGATATT	GAGGGCGTTA	GCGCCGGTAT	CCACGGAGCC	GTGGATCTGG	GCCGTGAGCA	17160
GCTAGAGAAA	GCTATTGAGC	AGCGCCTAGA	GCGTCGCCCC	ACCGCTGCCG	GTGTGGAAGA	17220
CCTTCCGCTT	CCCCCGGGAA	CAGTCTTAGA	AGCTGATCGT	TTACCGCCCT	CCTACGCOGA	17280
AGCGGTGGCT	GAGCGCCCGC	CGCCGGCTGA	CGTTCCTCTG	CCCGCATCCT	CAAAGCCGCC	17340
GGTGGCGGTG	GTGACCTTGC	CCCCGAAAAA	GAGAGTGTCT	GAAGAGCCTG	TGGAGGAAGT	17400
TGTGATTCTG	TCCTCCGCAC	CGCCGTGCTA	CGACGAGGTT	ATGGCACCGC	AGCCGACTCT	17460
GGTAGCCGAG	CAGGGCGCCA	TGAAAGCAGT	GCCCGTGATT	AAGCCGGCTC	AACCTTTTAC	17520
CCCAGCTGTG	CACGAAACGC	AACGCATAGT	GACCAACTTG	CCAATCACCA	CAGCTGTGAC	17580
ACGGGACGCG	GGGTGGCAGG	GCACTCTGAA	TGACATCGTG	GGCCTCGGCG	TTCGTACCGT	17640
GAAGGCGCGG	CGGTGCTATT	GAGGGGGCGC	GCAGCGGTAA	TAAAGAGAAC	ATAAAAAAGC	17700
AGGATTGTGT	TTTTTGTTTA	GCGGCCACTG	ACTCTCCCTC	TGTGTGACAC	GTOCTCGGCG	17760
AGAGCGTGAT	TGATTGAOCG	AGATGGCTAC	CCCGTCGATG	CTGCCGCAAT	GGTCCTACTG	17820
CACATCGCCG	GTCAGGACGC	GTCCGAGTAC	CTGTCCCCCG	GCTTGGTGCA	ATTCGCACAA	17880
GCCACCGAAT	CCTACTTTAA	CATTGGGAAC	AAGTTTAGAA	ACCCACCGGT	CGCCCCGACG	17940
CACGATGTCA	CCACGGAGCG	TTCGCAGCGT	CTGCAGCTCC	GCTTCGTGCC	CGTAGACCGG	18000
GAGGACACAC	AGTACTCCTA	CAAAACCCGC	TTCCAGCTAG	CCGTGGGCGA	CAACCGGGTG	18060
CTGGACATGG	CCAGCACGTA	TTTTGACATC	CGCGGTACGC	TGGAGAGGGG	CGCCAGTTTC	18120
AAGCCTTACA	GCGGCACGGC	CTACAACTCC	TTTGCCCCCA	ACAGTGCCCC	TAACAATACG	18180
CAGTTTAGGC	AGGCCAACAA	CGGTATCCTT	GCTCAGACCA	TAGCTCAAGC	TTCTTACGTG	18240
GCTACCATCG	GCGGTGCCAA	CAATGACTTG	CAAATGGGTG	TGGACGAGCG	TCAGCAGCCG	18300

11/41

FIGURE 1K

GTGTATGCGA	ACACTACGTA	CCAGCCGGAA	CCTCAGCTCG	GCATTGAAGG	TTGGACAGCT	18360
GGATCCATGG	CGGTCATCGA	TCAAGCAGGC	GGGCGGGTTC	TCAGGAACCC	TACTCAAAC	18420
CCCTGCTACG	GGTCCTATGC	TAAGCCGACT	AACGAGCACG	GGGGCATTAC	TAAAGCAAA	18480
ACTCAGGTGG	AGAAAAAGTA	CTACAGAACA	GGGGACAACG	GTAACCCGGA	AACAGTGTTT	18540
TATACTGAAG	AGGCTGACGT	GCTAACGCCC	GACACCCACC	TTGTTACACG	GGTACCGGCC	18600
GCGGATCGGG	CAAAGGTGGA	GGGGCTATCT	CAGCACGCAG	CTCCCAACAG	GCCGAACTTT	18660
ATCGGCTTTC	GGGACTGCTT	TGTAGGCTTG	ATGTATTATA	ACAGCGGGGG	CAACCTGGGC	18720
GTCTTAGCGG	GTCAATCCTC	TCAGCTGAAT	GCCGTGGTAG	ACCTGCAAGA	CCGCAACACT	18780
GAGCTTTCCT	ATCAGATGCT	TCTTGCAAAC	ACGACGGACA	GATCCCGCTA	TTTtagCATG	18840
TGGAACCAAG	CCATGGACTC	GTACGACCCG	GAGGTCAGGG	TGATAGATAA	CGTGGGCGTA	18900
GAGGACGAGA	TGCCTAATTA	CTGCTTTCCG	TTGTCGGGGG	TTcagATTGG	AAACCGTAGC	18960
CACGAGGTTC	AAAGAAACCA	ACAACAGTGG	CAAAATGTAG	CTAATAGTGA	CAACAATTAC	19020
ATAGGCAAGG	GGAACCTACC	GGCCATGGAG	ATAAATCTAG	CGGCCAATCT	CTGGCGTTCC	19080
TTTTTGTACA	GTAATGTGGC	GTTGTACTTG	CCAGACAACC	TTAAATTCAC	COCTCACAAC	19140
ATTCAACTCC	CGCCTAACAC	GAACACCTAC	GAGTACATGA	ACGGGCGAAT	CCCCGTTAGC	19200
GGCCTTATTG	ATACGTACGT	AAATATAGGC	ACGCGGTGGT	CGCCCGATGT	GATGGACAAC	19260
GTGAATCCCT	TTAACCACCA	CCGCAACTCG	GGCCTGCGTT	ACCGCTCCCA	GCTGCTGGGC	19320
AACGGCCGCT	TCTGCGACTT	TCACATTCAG	GTGCCACAAA	AGTTTTTTGC	TATTCGAAAC	19380
CTGCTTCTCC	TGCCCCGCAC	GTACACTTAC	GAGTGGTCCT	TTAGAAAGGA	CGTAAACATG	19440
ATCCTTCAGA	GCACTCTGGG	CAATGATCTG	CGGGTCGATG	GGGOCACGT	TAATATTACC	19500
AGCGTCAACC	TCTACGCCAG	CTTCTTTCC	ATGTCACATA	ACACCGCTTC	CACTTTGGAA	19560
GCTATGCTOC	GCAACGACAC	TAATGACCAG	TCTTTTAAATG	ACTATCTCTC	GGCGGCTAAC	19620
ATGTTGTATC	CCATTCOGOC	CAATGOCACC	CAACTGCCCA	TCCCTCACG	CAACTGGGCA	19680
GCGTTCGGTG	GCTGGAGTCT	CACCCGGCTA	AAACAGAGGG	AGACACCGGC	GCTGGGGTCC	19740
CCGTTGATC	CCTATTTAC	CTATTCGGGC	ACCATCCCGT	ACCTGGACGG	CACTTTTTAC	19800
CTCAGCCACA	CCTTTGCGAA	GGTGGCCATC	CAGTTTGACT	CTTCTGTGAC	CTGGCCCGGC	19860
AATGACAGGC	TTTTAAACCC	TAACGAGTTC	GAAATAAAAA	TAAGTGTGGA	CGGTGAAGGC	19920
TACAACGTGG	CTCAGAGCAA	TATGACTAAG	GACTGGTTCC	TGGTGCAGAT	GCTAGCGAAT	19980
TACAACATAG	GCTACCAGGG	ATATCACCTG	CCCCCGGACT	ACAAGGACAG	GACATTTTCC	20040
TTCTGCATA	ACTTCATACC	CATGTGCCGA	CAGGTTCCCA	ACCCAGCAAC	CGAGGGCTAC	20100
TTTGACTAG	GCATAGTGAA	CCATAGAACA	ACTCOGGCTT	ATTGGTTTCG	ATTCTGCCGC	20160

12/41

FIGURE 1L

GCTCCGCGCG	AGGGCCACCC	CTACCCCCAA	CTGGCCTTAC	CCCCTCATTG	GGACCCACGC	20220
CATGCCCTCC	GTGACCCAGA	GAGAAAGTTT	CTCTGCGACC	GCACCCTCTG	GCGAATCCCC	20280
TTCTCCTCGA	ACTTCATGTC	CATGGGGTCC	CTCACAGATC	TCGGACAGAA	CCTACTGTAT	20340
GCCAATGCCG	CGCATGCCCT	AGACATGACT	TTTGAGATGG	ATCCCATCAA	TGAGCCCACT	20400
CTGCTGTACG	TTCTGTTTGA	GGTGTTTGAC	GTGGCCCGCG	TTCACCAGCC	CCACAGAGGC	20460
GTGATCGAAG	TGGTGTACTT	GAGAACGCCA	TTCTCAGCCG	GCAACGCTAC	CACATAAGTG	20520
CCGGCTTCCC	TCTCAGGCCC	CGCGATGGGT	TCTCGGAAG	AGGAGCTGAG	ATTCATCCTT	20580
CACGATCTCG	GTGTGGGGCC	ATACTTCCTC	GGCACTTTTCG	ATAAACACTT	TCCGGGGTTC	20640
ATCTCCAAAG	ACCGAATGAG	CTGTGCCATA	GTCAACACTG	CCGGACGCGA	AACCGGGGGC	20700
GTGCATTGGC	TGGCCATGGC	TTGGCACCCA	GCCTCGCAGA	CCTTTTACAT	GTTTGACCCT	20760
TTCGGTTTCT	CGGATCAAAA	GCTAAAGCAA	ATTTACAAC	TTGAGTATCA	GGGCCTCCTA	20820
AAGCGCAGCG	CCCTGACTTC	CACTGCTGAC	CGCTGCCTGA	CCCTTATTCA	AAGCACTCAA	20880
TCTGTCCAGG	GACCCAACAG	CGCCGCCTGC	GGTCTGTTCT	GCTGCATGTT	CCTCCACGCC	20940
TTTGTCCGCT	GGCCGCTTAG	GGCCATGGAC	AACAATCCCA	CCATGAACCT	CATCCACGGA	21000
GTTCCCAACA	ACATGTTGGA	GAGCCCCAGC	TCCCAAAATG	TGTTTTTGAG	AAACCAGCAA	21060
AATCTGTACC	GTTTCCTAAG	ACGCCACTCC	CCCCATTTTG	TTAAGCATGC	GGCTCAAATT	21120
GAGGCTGACA	CGCCCTTTGA	TAAATGTGA	ACAAATTAGA	CCGTGAGCCA	TGATTGCAGA	21180
AGCATGTCAT	TTTTTTTTTA	TTGTTTAAAA	TAAAAACAAC	ACATAACATC	TGCCGCCTGT	21240
CCTCCCGTGA	TTTCTCTGCG	TTTATTTGCA	AATGGGGGGC	ACCTTAAAC	AAAGAGTCAT	21300
CTGCATCGTA	CTGATCGATG	GGCAGAATAA	CATTCTGATG	CTGGTACTGC	GGGTCCAGC	21360
GGAATTGCGG	AATGGTAATG	GGGGGGCTCT	GTTTAACCAG	CGCGGACCAC	ATCTGCTTAA	21420
CCAGCTGCAA	GGCTGAAATC	ATATCTGGAG	CCGAAATCTT	GAAATCGCAG	TTTCGCTGGG	21480
CATTAGCCCG	CGTCTGCCGG	TACACAGGGT	TACAGCACTG	AAATACTAAC	ACCGATGGGT	21540
GTTCTACGCT	GGCCAGGAGT	TTGGGATCTT	CTACGAGGCT	CTTATCTACC	GCAGAGCCCG	21600
CGTTGATATT	AAAGGGCGTT	ATCTTGCCATA	CCTGAOGGCC	TAGGAGGGGC	AATTGGGAGT	21660
GACCCCAAGT	ACAATCACAC	TTTAAAGGCA	TAAGCAGATG	AGTTCCGGCA	CTTTCATCC	21720
TGGGGTAACA	GGCTTTCTGA	AAGGTCATGA	TCTGOCAGAA	AGCCTGCAAA	GCCTTGGGCC	21780
CCTCGCTGAA	AAACATACCA	CAAGACTTTG	AGGTAAAGCT	GCCGGCCGGC	AAAGCGGCGT	21840
CAAAGTGACA	GCAAGCCGCG	TCTTCATTCT	TTAGCTGCAC	TACGTTTATA	TTCCACGGGT	21900
TGGTGGTGAT	CTTTGTCTTA	TGCGGGGTCT	CTTTTAAAGC	CCGCTGCCCA	TTTTCGCTGT	21960

13/41

FIGURE 1M

TCACATCCAT	CTCTATCACT	TGGTCTTTGG	TAAGCATAGG	CAGGCCATGC	AGGCAGTGAA	22020
GGGCCCCGTC	TCCCCCTCG	GTACACTGGT	GGCGCCAGAC	CACACAGCCC	GTGGGGCTCC	22080
ACGAGGTCGT	CCCCAGGCCT	GCGACTTTTA	ACACAAAATC	ATACAAGAAG	CGGCCCATAA	22140
TAGTTAGCAC	GGTTTTCTGA	GTACTGAAAG	TAAGAGGCAG	GTACACTTTA	GACTCATTA	22200
GCCAAGCTTG	TGCAACCTTC	CTAAAACACT	CGAGCGTGCC	AGTGTCGGGC	AGCAAGGTTA	22260
AGTTTTTAAT	ATCCACTTTC	AAAGGCACAC	ACAGCCCCAC	TGCTAATTCC	ATGGCCCGCT	22320
GCCAAGCAAC	TTCGTCGGCT	TCCAGCAAGG	CCCGGCTGGC	CGCCGGCAGG	GCGGGAGCGG	22380
CGGCCTCAGC	GGCTGGGGCT	GAAGGTTTGA	AAATCTTGGC	GCGCTTAACG	GCTGTGACAT	22440
CTTCGGCGGG	GGGCTCAGCG	ATCGGCGCGC	GCCGTTTGCG	GCTGACTTTT	TTCCGGGGCG	22500
TCTCATCTAT	CACTAAGGGG	TTCTCGTCCC	CGCTGCTGTC	AGCCGAATC	GTGGCTCGCG	22560
TTAAGTCACC	GCTGCGATTC	ATTATTCTCT	CCTAGATAAC	GACAACAAAT	GGCAGAGAAA	22620
GGCAGTGAAA	ATCAGCGGCC	AGAGAACGAC	ACTGAGCTAG	CAGCGGTTTC	AGAAGCCCTA	22680
GGCGCGGCCG	CTTCGGCCCC	CTCACGTAAC	TCCCCGACTG	ACACGGATTC	AGGGGTGGAA	22740
ATGACGCCCA	CCAGCAGCCC	CGAGCCGCCC	GCCGCTCCCC	CAAGTTCGCC	TGCCGCAGCA	22800
CCTGCCCCCTC	AGAAGAACCA	GGAGGAGCTC	TCTTCCCCCG	AGCCCGCGGT	AGCAGCAGCG	22860
GAGCCAGAAG	CCGCTTCGCG	GCCCAGACCA	CCCACACCCA	COGTTCAGGT	CCCGCGGGAG	22920
CCGAGCGAGG	ATCAACCTGA	CGGACCCGCG	ACGAGGCCTT	CGTACGTGAG	CGAGGATTGC	22980
CTCATCGGCC	ATATCTCTCG	CCAGGCTAAC	ATTGTTAGAG	ACAGCCTGGC	AGACCGCTGG	23040
GAGTTAGAGC	CCACCGTGTC	GGCTCTCTCC	GAGGCTTACG	AAAAGCTCCT	CTTTTGTCCC	23100
AAGGTACCAC	CCAAGAAGCA	AGAGAATGGC	ACTTGCGAAC	CTGAACCTCG	CGTTAATTTT	23160
TTCCCCACCT	TTGTAGTGCC	CGAAACTTTA	GCCACGTACC	ACATCTTTTT	CCAAAACCAA	23220
AAAATCCCCC	TGTCTTGTCG	CGCCAACCGC	ACCCACACAG	ACACCATCAT	GCACCTCTAC	23280
TGGGGGACT	CCTTACCGTG	CTTCCCCACG	CTGCAGCTGG	TCAACAAAAT	CTTTGAAGGC	23340
TTGGGCTCAG	AGGAGCGGCG	CGCAGCCAAC	TGCTGAAAG	ATCAAGAGGA	TAACAGCGCG	23400
TTAGTTGAGC	TCGAAGGGGA	CAGTCCCCGA	CTGGCTGTGG	TTAAGCGCAC	ACTGTCTTTG	23460
ACACATTTTCG	CCTACCCTGC	CATAACACTA	CCGCCTAAGG	TGATGGCAGC	TGCTACTGGC	23520
AGCCTCATTC	ATGAATCAGC	AGCGACCGCC	GAACCGGAAG	CTGAGGCGCT	GCCAGAAGCC	23580
GAGGAGCCCCG	TGGTTAGTGA	CCCTGAACTT	GCTCGCTGGT	TGGGGCTCAA	CTTACAACAG	23640
GAGCCCGAGG	CCACGGCCCA	GGCTTTGGAA	GAAAGACGCA	AGATTATGTT	GGCAGTATGC	23700
TTAGTCACAC	TTCAGCTCGA	GTGCCTGCAC	AAGTTTTTTT	CTTCAGAGGA	TGTCATCAAA	23760
AAGCTGGGAG	AGAGCCTCCA	CTACGCCTTT	CGCCACGGCT	ACGTGCGCCA	AGCCTGCTCC	23820

14/41

FIGURE 1N

ATTTCTAACG	TGGAAC TAAC	GAACATCGTC	TCATACCTGG	GTATCTTGCA	CGAAAACCGC	23880
TTGGGACAGA	GTACCCTACA	CGCCACCCTT	AAAGACGAGA	ACCGCAGAGA	CTACATCAGA	23940
GACACAGTCT	TTCTCTTTCT	GGTTTATACT	TGGCAGACTG	CCATGGGCAT	TTGGCAGCAG	24000
TGCCTCGAGA	CTGAGAACGT	AAAAGA ACTT	GAAAAGCTCT	TGCAAAAAAG	CAAGAGGGCT	24060
CTCTGGACGG	GCTTCGACGA	GCTCACCATA	GCTCAAGACC	TAGCTGACAT	AGTGTTCCCC	24120
CCCAAATTCT	TGCACACCTT	GCAAGCCGGC	CTGCCAGACC	TTACATCCCA	GAGTCTCCTT	24180
CACAAC TTTC	GCTCCTTCAT	TTTCGAACGC	TCGGGCATTC	TACCCGCCAT	GTGCAATGCA	24240
CTGCCCACCG	ACTTCATCCC	TATCAGCTAC	CGGGAGTGCC	CTCCAAC TTT	CTGGGCCTAC	24300
ACCTACCTCT	TTAAACTGGC	CAATTACCTC	ATGTTTCACT	CCGACATCGC	TTACGATCGG	24360
AGCGGCCCCG	GTCTCATGGA	ATGCTACTGT	CGCTGCAACC	TGTGCAGTCC	TCACCGCTGC	24420
TTGGCGACCA	ACCCCGCCCT	GCTCAGCGAG	ACCCAAGTTA	TCGGTACCTT	CGAGATTCAG	24480
GGCCCTCCTG	CTCAAGACGG	ACAGCCGACC	AAACCGCCCC	TCAGGCTGAC	TGCAGGTCTC	24540
TGGACTTCCG	CCTACCTGCG	CAAATTTGTA	CCGCAAGACT	TCAACGCCCA	CAAAATAGCC	24600
TTCTACGAAG	ACCAATCCAA	AAAGCCGAAA	GTGACCCCCA	GCGCTTGTGT	CATCACTGAA	24660
GAAAAAGTTT	TAGCCCAATT	GCATGAAATT	AAAAAAGCGC	GGGAAGACTT	TCCTCTTAAA	24720
AAGGGGCACG	GAGTGTATCT	GGACCCTCAG	ACCGGCGAGG	AGCTGAACGG	ACCCGCACCC	24780
TCCGCAGCTA	GGAATGAAAC	CCCGCAGCAT	GTCGGCAGCC	GGGCCTTCOG	CGGCTCAGGC	24840
TTCGGAGGGC	CAACAGCTGC	CGCCACAGAC	AGCGGGGCTG	CAGCCGAGCA	AGAGGGCTGT	24900
GAGGAAGGTA	GTAGCTTCTC	TGAATCCAC	CGCGGCCCTG	GAAGACATAT	CCGAGGGGGA	24960
GGAAGGCTTC	CCCCTGACGG	ACGAGGAAGA	CGGGGACACC	CTGGAGAGCG	ATTTCAGCGA	25020
CTTCACGGAC	GAAGACGTCG	AGGAGGAGGA	TATGATTTCTG	ATACCCCGCG	ACCAGGGGCA	25080
CTCCGGCGAG	CTCGAGGAGG	GCGAAATTCC	CGCAACGGTA	GCGGCGACGG	CGGTCAAGAA	25140
GGGCCAGGGC	AAGAAGAGTA	GGTGGGACCA	GCAGGTCCGC	TCCACAGCGC	CTCTAAAGGG	25200
CGCTAGAGGT	AAGAGGAGCT	ACAGCTCCTG	GAAACCCCTC	AAGCCCACTA	TCCTTTCATG	25260
CTTACTGCAG	AGCTCCGGCA	GCACTGCCTT	CACTCGCCGC	TATCTGCTTT	TTCGCCATGG	25320
CGTGTCCGTT	CCCTCCAGGG	TAATTCATTA	CTATAATTCT	TACTGCAGAC	CCGAAGCTGA	25380
CCAAAACCGC	CACTCAGAGC	AAAAAGAGCC	GCCGGAGTGC	CAGCGCGGCG	CGCCCTCGCC	25440
CTCCTCCTCT	TCCTCCCAAG	CGTGCTCGGG	CGCCCCGCCG	CCCCAAAGGC	CAGCGCCATC	25500
AGGCCGACGA	CGCAAGCACC	GAGGGCCGCG	ACAAGCTTCG	GGAGCTGATC	TTTCCCACTC	25560
TCTATGCCAT	ATTCCAACAA	AGTCGCGCTC	AGCGGTGTCA	CCTCAAAGTG	AAAAATAGAT	25620

FIGURE 10

CCTTACGTTC	ACTGACGCGC	AGCTGCCTCT	ACCACAACAA	GGAGGAACAG	CTCCAGCGAA	25680
CCCTAGCAGA	CTCCGAGGCG	CTTCTCAGTA	AATACTGCTC	TGCAGCTCCG	ACACGATTCT	25740
CGCCGCCCTC	TTATACCGAG	TCTCCCGCCA	AGGACGAATC	CGGACCCGCC	TAAACTCTCA	25800
GCATGAGCAA	AGAAATTCCC	ACACCTTATG	TTTGGACCTT	TCAACCTCAG	ATGGGAGCGG	25860
CCGCAGGTGC	CAGTCAAGAT	TACTCGACCC	GCATGAATTG	GTTCAGCGCG	GGACCTGATA	25920
TGATCCACGA	CGTTAACAAC	ATTCTGTGACG	CCCCAAAACCG	CATCCTTATG	ACTCAGTCGG	25980
CCATTACCGC	CACTCCCAGG	AATCTGATTG	ATCCCAGACA	GTGGGCCGCC	CACCTCATCA	26040
AACAACCGGT	GGTGGGCACC	ACCCACGTGG	AAATGCCTCG	CAACGAAGTC	CTAGAACAAC	26100
ATCTGACCTC	ACATGGCGCT	CAAATCGCGG	GCGGAGGCGC	TGCGGGCGAT	TACTTTAAAA	26160
GCCCCACTTC	AGCTCGAACC	CTTATCCCGC	TCACCGCCTC	CTGCTTAAGA	CCAGATGGAG	26220
TCTTTCAACT	AGGAGGAGGC	TCGCGTTCAT	CTTTCAACCC	CCTGCAAACA	GATTTTGCCT	26280
TCCACGCCCT	GCCCTCCAGA	CCGCGCCACG	GGGGCATAGG	ATCCAGGCAG	TTTGTAGAGG	26340
AATTTGTGCC	CGCCGTCTAC	CTCAACCCCT	ACTCGGGACC	GCCGGACTCT	TATCCGGACC	26400
AGTTTATACG	CCACTACAAC	GTGTACAGCA	ACTCTGTGAG	CGGTTATAGC	TGAGATTGTA	26460
AGACTCTCCT	ATCTGTCTCT	GTGCTGCTTT	TCCGCTTCAA	GCCCCACAAG	CATGAAGGGG	26520
TTTCTGCTCA	TCTTCAGCCT	GCTTGTGCAT	TGTCCCCTAA	TTCATGTTGG	GACCATTAGC	26580
TTCTATGCTG	CAAGGCCCGG	GTCTGAGCCT	AACGCGACTT	ATGTTTGTA	CTATGGAAGC	26640
GAGTCAGATT	ACAACCCAC	CACGGTTCTG	TGGTTGGCTC	GAGAGACCGA	TGGCTCCTGG	26700
ATCTCTGTTT	TTTTCCGTCA	CAACGGCTCC	TCAACTGCAG	CCCCCGGGT	CGTCGCGCAC	26760
TTTACTGACC	ACAACAGCAG	CATTGTGGTG	CCCCAGTATT	ACCTCCTCAA	CAACTCACTC	26820
TCTAAGCTCT	GCTGCTCATA	CCGGCACAAC	GAGCGTTCTC	AGTTTACCTG	CAACAAAGCT	26880
GACGTCCCTA	CCTGTCACGA	GCCCGGCAAG	CCGCTCACCC	TCCGGTCTC	CCCCGCGCTG	26940
GGAAGTGGC	ACCAAGCAGT	CACCTGGTTT	TTTCAAAATG	TACCCATAGC	TACTGTTTAC	27000
CGAOCCTGGG	GCAATGTAAAC	TTGGTTTTGT	CCTCCCTTCA	TGTGTACCTT	TAATGTCAGC	27060
CTGAACTCCC	TACTTATTTA	CAACTTTTCT	GACAAAACCG	GGGGGCAATA	CACAGCTCTC	27120
ATGCACTCCG	GACCTGCTTC	CCTCTTTTCA	CTCTTTAAGC	CAACGACTTG	TGTCACCAAG	27180
GTGGAGGACC	CGCCGTATGC	CAACGACCCG	GCCTCGCCTG	TGTGGCGCCC	ACTGCTTTTT	27240
GCCTTCGTCC	TCTGCACCGG	CTGCGCGGTG	TTGTAAACCG	CCTTCGGTCC	ATCGATTCTA	27300
TCCGGTACCC	GAAAGCTTAT	CTCAGCCCGC	TTTTGGAGTC	CCGAGCCCTA	TACCACCCTC	27360
CACTAACAGT	CCCCCATGG	AGCCAGACGG	AGTTCATGCC	GAGCAGCAGT	TTATCCTCAA	27420
TCAGATTTCC	TGCGCCAACA	CTGCCCTCCA	GCGTCAAAGG	GAGGAACTAG	CTTCCCTTGT	27480

16/41

FIGURE 1P

CATGTTGCAT	GCCTGTAAGC	GTGGCCTCTT	TTGTCCAGTC	AAAACTTACA	AGCTCAGCCT	27540
CAACGCCTCG	GCCAGCGAGC	ACAGCCTGCA	CTTTGAAAAA	AGTCCCTCCC	GATTCAACCT	27600
GGTCAACACT	CACGCCGGAG	CTTCTGTGCG	AGTGGCCCTA	CACCACCAGG	GAGCTTCCGG	27660
CAGCATCCGC	TGTTCTGTG	CCCACGCCGA	GTGCCTCCCC	GTCTCTCTCA	AGACCCTCTG	27720
TGCCTTTAAC	TTTTTAGATT	AGCTGAAAGC	AAATATAAAA	TGGTGTGCTT	ACCGTAATTC	27780
TGTTTTGACT	TGTGTGCTTG	ATTTCTCCCC	CTGCGCCGTA	ATCCAGTGCC	CCTCTTCAAA	27840
ACTCTCGTAC	CCTATGCGAT	TCGCATAGGC	ATATTTTCTA	AAAGCTCTGA	AGTCAACATC	27900
ACTCTCAAAC	ACTTCTCCGT	TGTAGGTTAC	TTTCATCTAC	AGATAAAGTC	ATCCACCGGT	27960
TAACATCATG	AAGAGAAGTG	TGCCCCAGGA	CTTTAATCTT	GTGTATCCGT	ACAAGGCTAA	28020
GAGGCCCAAC	ATCATGCCGC	CCTTTTTTTGA	CCGCAATGGC	TTTGTTGAAA	ACCAAGAAGC	28080
CACGCTAGCC	ATGCTTGTGG	AAAAGCCGCT	CACGTTTCGAC	AAGGAAGGTG	CGCTGACCCT	28140
GGGCGTCGGA	CGCGGCATCC	GCATTAAACC	CGCGGGGCTT	CTGGAGACAA	ACGACCTCGC	28200
GTCCGCTGTC	TCCCCACOGC	TGGCCTCOGA	TGAGGCCGGC	AACGTCACGC	TCAACATGTC	28260
TGACGGGGCTA	TATACTAAGG	ACAACAAGCT	AGCTGTCAAA	GTAGGTCCCG	GGCTGTCCCT	28320
CGACTCCAAT	AATGCTCTCC	AGGTCCACAC	AGGCGACGGG	CTCACGGTAA	CCGATGACAA	28380
GGTGTCTCTA	AATACCCAAG	CTCCCCTCTC	GACCACCAGC	GCGGGCCTCT	CCCTACTTCT	28440
GGGTCCCAGC	CTCCACTTAG	GTGAGGAGGA	ACGACTAACA	GTAAACACCG	GAGCGGGCCT	28500
CCAAATTAGC	AATAACGCTC	TGGCCGTAAA	AGTAGGTTCA	GGTATCACCG	TAGATGCTCA	28560
AAACCAGCTC	GCTGCATCCC	TGGGGGACGG	TCTAGAAAGC	AGAGATAATA	AAACTGTCTG	28620
TAAGGCTGGG	CCCGGACTTA	CAATAACTAA	TCAAGCTCTT	ACTGTTGCTA	CCGGGAACGG	28680
CCTTCAGGTC	AACCCGGAAG	GGCAACTGCA	GCTAAACATT	ACTGCCGGTC	AGGGCCTCAA	28740
CTTTGCAAAC	AACAGCCTCG	COGTGGAGCT	GGGCTCGGGC	CTGCATTTTC	CCCTGGCCA	28800
AAACCAAGTA	AGCCTTTATC	CCGGAGATGG	AATAGACATC	CGAGATAATA	GGGTGACTGT	28860
GCCCCGTGGG	CCAGGCCTGA	GAATGCTCAA	CCACCAACTT	GCCGTAGCTT	CCGGAGACGG	28920
TTTAGAAGTC	CACAGCGACA	CCCTCCGGTT	AAAGCTCTCC	CACGGCCTGA	CATTTGAAAA	28980
TGGCGCCGTA	CGAGCAAAAC	TAGGACCAGG	ACTTGGCACA	GACGACTCTG	GTCCGGTCCGT	29040
GGTTCGCACA	GGTCGAGGAC	TTAGAGTTGC	AAACGGCCAA	GTCCAGATCT	TCAGCGGAAG	29100
AGGCACCGCC	ATCGGCACTG	ATAGCAGCCT	CACTCTCAAC	ATCCGGGGCGC	CCCTACAATT	29160
TTCTGGACCC	GCCTTGACTG	CTAGTTTGCA	AGGCAGTGGT	CCGATTACTT	ACAACAGCAA	29220
CAATGGCACT	TTCGGTCTCT	CTATAGGCCC	CGGAATGTGG	GTAGACCAAA	ACAGACTTCA	29280

17/41

FIGURE 1Q

GGTAAACCCA	GGCGCTGGTT	TAGTCTTCCA	AGGAAACAAC	CTTGTCCCAA	ACCTTGCGGA	29340
TCCGCTGGCT	ATTTCCGACA	GCAAAATTAG	TCTCAGTCTC	GGTCCCGGCC	TGACCCAAGC	29400
TTCCAACGCC	CTGACTTTAA	GTTTAGGAAA	CGGGCTTGAA	TTCTCCAATC	AAGCCGTTGE	29460
TATAAAAGCG	GGCCGGGGCT	TACGCTTTGA	GTCTTCCTCA	CAAGCTTTAG	AGAGCAGCCT	29520
CACAGTCGGA	AATGGCTTAA	CGCTTACCGA	TACTGTGATC	CGCCCCAACC	TAGGGGACGG	29580
CCTAGAGGTC	AGAGACAATA	AAATCATTGT	TAAGCTGGGC	GCGAATCTTC	GTTTTGAAAA	29640
CGGAGCCGTA	ACCGCCGGCA	CCGTTAACCC	TTCTGCGCCC	GAGGCACCAC	CAACTCTCAC	29700
TGCAGAACCA	CCCCTCCGAG	CCTCCAATC	CCATCTTCAA	CTGTCCCTAT	CGGAGGGCTT	29760
GGTTGTGCAT	AACAACGCCC	TTGCTCTCCA	ACTGGGAGAC	GGCATGGAAG	TAAATCAGCA	29820
CGGACTTACT	TTAAGAGTAG	GCTCGGGTTT	GCAAATGCGT	GACGGCATT	TAACAGTTAC	29880
ACCCAGCGGC	ACTCCTATTG	AGCCAGACT	GACTGCCCCA	CTGACTCAGA	CAGAGAATGG	29940
AATCGGGCTC	GCTCTCGGCG	CCGGCTTGGA	ATTAGACGAG	AGCGCGCTCC	AAGTAAAAGG	30000
TGGGCCCCGG	ATGCGCCTGA	ACCCTGTAGA	AAAGTATGTA	ACCCTGCTCC	TGGGTCTGG	30060
CCTTAGTTTT	GGGCAGCCGG	CCAACAGGAC	AAATTATGAT	GTGCGCGTTT	CTGTGGAGCC	30120
CCCCATGGTT	TTCGGACAGC	GTGGTCAGCT	CACATTTTTA	GTGGGTCACG	GACTACACAT	30180
TCAAAATTCC	AAACTTCAGC	TCAATTTGGG	ACAAGGCCTC	AGAACTGACC	CCGTCAACAA	30240
CCAGCTGGAA	GTGCCCCTCG	GTCAAGGTTT	GGAAATTGCA	GACGAATCCC	AGGTTAGGGT	30300
TAAATTGGGC	GATGGCCTGC	AGTTTGATT	ACAAGCTCGC	ATCACTACCG	CTCCTAACAT	30360
GGTCACTGAA	ACTCTGTGGA	CCGGAACAGG	CAGTAATGCT	AATGTTACAT	GGCGGGGCTA	30420
CACTGCCCCC	GGCAGCAAAC	TCTTTTTGAG	TCTCACTCGG	TTCAGCACTG	GTCTAGTTTT	30480
AGGAAACATG	ACTATTGACA	GCAATGCATC	CTTTGGGCAA	TACATTAAACG	CGGGACACGA	30540
ACAGATCGAA	TGCTTTATAT	TGTTGGACAA	TCAGGGTAAC	CTAAAAGAAG	GATCTAACTT	30600
GCAAGGCACT	TGGGAAGTGA	AGAACAACCC	CTCTGCTTCC	AAAGCTGCTT	TTTTGCCTTC	30660
CACCGCCCTA	TACCCCATCC	TCAACGAAAG	CCGAGGGAGT	CTTCCTGGAA	AAAATCTTGT	30720
GGGCATGCAA	GCCATACTGG	GAGGCGGGGG	CACTTGCACT	GTGATAGCCA	COCTCAATGG	30780
CAGACGCAGC	AACAACATATC	CCGCGGGCCA	GTCCATAATT	TTCGTGTGGC	AAGAATTCAA	30840
CACCATAGCC	CGCCAACCTC	TGAACCACTC	TACACTTACT	TTTTCTTACT	GGACTTAAAT	30900
AAGTTGGA	TAAAGAGTTA	AAGTGAATGT	TTAAGTGCAA	CAGACTTTTA	TTGGTTTTGG	30960
CTCACAACAA	ATTACAACAG	CATAGACAAG	TCATACCGGT	CAACAACAC	AGGCTCTCGA	31020
AAACGGGCTA	ACCGCTCCAA	GAATCTGTCA	CGCAGACGAG	CAAGTCCTAA	ATGTTTTTTC	31080
ACTCTCTTCG	GGGCCAAGTT	CAGCATGTAT	CGGATTTTCT	GCTTACACCT	TTTGTAGACAG	31140

18/41

FIGURE 1R

CAGTTTACAC TCATTTCCGT TAAAGGATTA CAACTGCGGC ATATGAGAAT TAAGTATATA 31200
CAACTATTGC CCTTTACCCA CAAACACTCC CCCACGGGG TGCACCTGAT GTAGCTGCCC 31260
TCCTCAATCA TGAAAGTGCT ATTAAAGTAA ATTAAATGAA CATTATTAC ATACACGCTT 31320
CCCACATAGG CCAAAAAAAC AGAGGACAAC TTTGACAGCT CCCGCCTGAA ATACCAATAC 31380
ACTCTATCAA ACTGCGCACC GTGCACGCAC TGCTTTACCA GGCCTTGAAA GTAAACAGCG 31440
GCGGACCGAC ACTGCAAGCT TCTAGGCTTT GGCAGTGGC AGTGAATATA TAGCCACTCC 31500
TCCCCATGCA CGTAGTAGGA ACGCCGCTTC CCGGAATCA CAAATGACAA GCAGTAGTCA 31560
CAGAGGCAAC TAGTCAAGTG AGCGTCTCC TGAGGCATGA TTACCTTCCA TGGAATGGGC 31620
CAGTGAATCA TAGTGGCAA GCCAGCTGCA TCTGGAGCGC TGCGAACCTT GGCTACATGT 31680
GGTGATTGGC GACGCAGATG GAGACAGGAC CTGCAATTCT GAAGACCACT GCAACAGCTT 31740
CTGCGTACGC TTGTATTTAC AGTACATAAA AAAGCACTTT TGCCACAGAG CGGTCTTACT 31800
CAACCGACAG CTTTTTCTT TCTGACGCTG CCTTCTGCTA CTCAGGTAGT ACAAGTCCAA 31860
AAGAGCCAAA CGGACACTCA AATCCGGGT ATCTCGATGC TGAAGCCAGA GTCCAAAAGT 31920
AACCACGCTA AAAGCCTGCA TCCATATTTT GTAACGCTG TAACTCCATC CCAGAGCCGG 31980
GCACCGCACT TGGTCCACCA TAGCTGCAA CAAACGGGAC AATTAAGGAA AGTAAATGA 32040
GCGCTGGGG CGGACTCTTC TCCCGTTCGT AGGAAACAGC CACGTATCAA ACACCTTTT 32100
CAACACTGGC TCTCCAGCCG CTACTCGTTG AATTAATTG TCCCTGTGCT CAAACAACCC 32160
ACACTGGTAA CGGTGGTCGC TAGGCAAACA TGTCAAATAG CACATAATCA TTTCTTCAC 32220
TTTAAGCAAA CATCGACTAG CAGACACTTC ACTTAATTCA GCACAGTCAT AGCAAGGAAT 32280
GATTATACAC TTGTCATCTA ATCCACTGCC CATGTACACA TTGCCCCAGG CAAAAGTGGG 32340
CAGGGACTTT AAGAGCTGAT TGCTCGCCCC GACATAGTTG GTAAAATACA GCAAATGCAC 32400
CTTGTTAACA TACACACTCC CCACATAGTA AATATACCGA GTAGACAGCT TAGAAAGCTC 32460
CCTCCGAAAA AATGGGAACA TGGTATCAAA GGCAGTGCCC GCAACACACA TCTTGAACAG 32520
ATCCATCAGG ATAGTAGCTC GACACAGCCC CTGCAGACTT TGGTCAGCTT GCTTGCTGCA 32580
GCAGTACACT CTCCACGTAG CATCTCCGCT GATGAAGTAT TCGCTATCGC AGCGACCAAA 32640
AATACAGCAA TCACAAGGCA GACGCAACAG TCTTTCATCC AGACTGTTCA TGAGAGGCTT 32700
TAGAGGTATG GGAAAAATC CAAAGTGCTC AAAATAAGCA GCGCTGGGCT CATTCTGACA 32760
TTCCCCAAC ATGCTGAGTC GAACCATAGC ACAGTCATAC AAACCTCAGCT GTCGGAATTG 32820
ATCTTCCATG ATTGAGTTTC TACTGAGATA TTATCTCAA CTTAAACTG TTGCTCACCA 32880
ACTCTATGCG AACTTGCTCA AGAAGCTCTT GGTTTAGGGC GACCTCTTCT GGTCTCGGA 32940

19/41

FIGURE 1S

AGTTACTGAT GGAACAACAA GCGCCGCCCA ACTTCAAATT TCCAGCCGAC CCAATCCAGT 33000
GGTCTCTCAA CTCACGCGCA CAAGCTACTA TGCAGTCCTC ACTTTCGTCA AAGTCAGCAG 33060
CGCCTATAGA AATCAACACA CTGAGTCCAC CATCTTCAGC TTTTAAGGGA TAACAGCTGA 33120
TAGCAAAGTG GTTCTGAGAC CACGGCAAAG CACGTAGGAA TTGCTGTTAA GTTAATTTCC 33180
AAACACCGCT GAAGCAGCTC TATGGTTGCT GGACATATGT CCTCTGCATA GAAGCTTTGA 33240
ACATAACTTA AGACAGGGCC GGGCACATGA AACACAAACA GAGAACTATA CACAATCTGG 33300
GCCATGATCA CTCACATTTA AATAGCAGCT GAAAAGTGGC TTTCTTCACT TGGGAGCATA 33360
ATTAGCGAAG ACTGTGCCAG AATGCTCAGC TCGAAAGGCG GTGGGTCTCG CAGAGGCAGG 33420
TTCGGAGCTC TAATTAAACA CAGGTGGGTA ATCCAGTCAA CGATGAGGAC CAGCTGAAAA 33480
GTGGCTTTCT TCACTTGGGA GCAAATTAG CGAAGACTGT GCCAGAATGC TCACGTCGAA 33540
AGGCGGTGGG TCTCGCAGAG GCAGGTTCCG AGCTCTAATT AAACACAGGT GGGTAATCCA 33600
GTCAACGATG AGGACTTTTA AAAAAGTGTG TAAAGTGA GCAAGTAAAGT TAGAGGCAGA 33660
CACAGAAAAA ACTACAGTTA AACTATCAGT TGCTGAAATT GAAAAGCACC CAATAATTAT 33720
GCGCGAGGGC ACAGGCAATA AAAGTGTTAG CCCCTCGGCT AACGCGTCAG CTAATAAATC 33780
TTTAGCTAAA GTATCTACTG GCCGCGTGGT AAAAGTTTGA ATATAATTTA CGACAGGAGC 33840
TGGCAAGTGA AACTCCACAA AAAAAGTAAA TGGCTGCACA CACGCCATTA TTTTGAAAAT 33900
AAGAAGTACT CACAAAATCA GCTGGAGCTG CCGCAAGTGA AAAAGACCAG CTGAAGTCTT 33960
ATTTTAAACT GTAAAATATA AAAAAAAAAA TAGGGCGTGA AAAAAATGA GAAAATAATA 34020
CCGGATATGA CTATTAAGGG CGTACACTGA AACTGGGTAA TATTTGAGAA AAAGATTAAG 34080
ATAATAGCTG AACAAATGTT GTGTGCAGAA CACGGAAQAA TGGTGGCGAA AAAAAAATC 34140
AGTGTAAGCA CATGGCGCGC ACGTACTTCC GTGAGAAAAA TTAAAAAAT TTACCCAGTA 34200
TAAGGTGOGT CATTAGACCC GCCTTGTGGC GCGGTTGTAG CCCTGCCCTT TGCCCCGCC 34260
CGCGCGCGCG CCCGCGCGCC GCGCGCGCGC CCCTCAGCCC CGCCAGCGC CGCGCGCTCC 34320
GCGACGCGCT CCGCCCCACA GTTACGTCAG CACGCCACGC TCGCCGTCGT TCGGTCATAA 34380
ATGACGTGGC AAAAATGATT GGCAGTTGGA CCGCTGCCAT CAGTGTAAGT TAGATTATTG 34440
ATGATG 34446

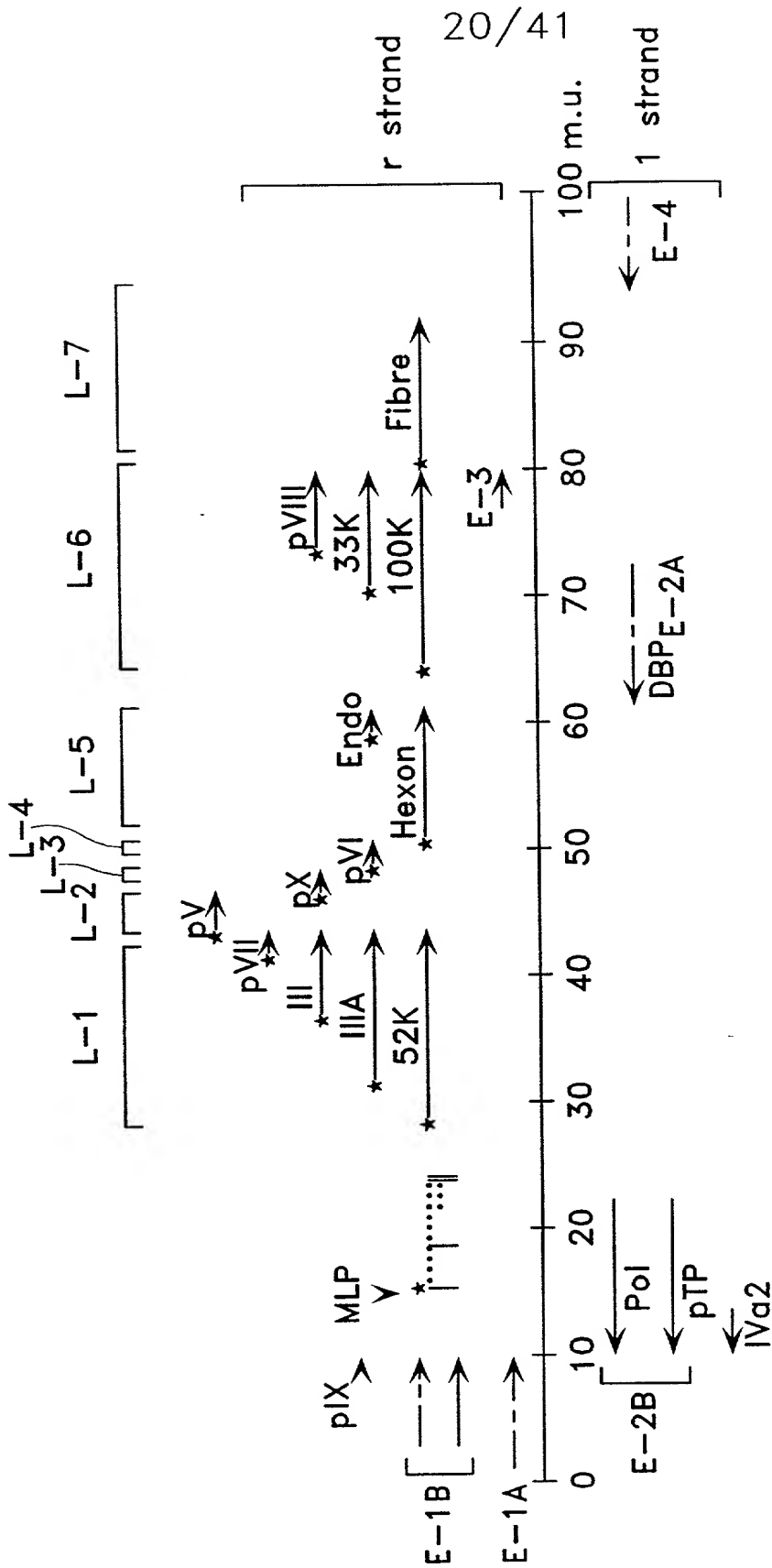


FIGURE 2

21/41

Construction of BAV600

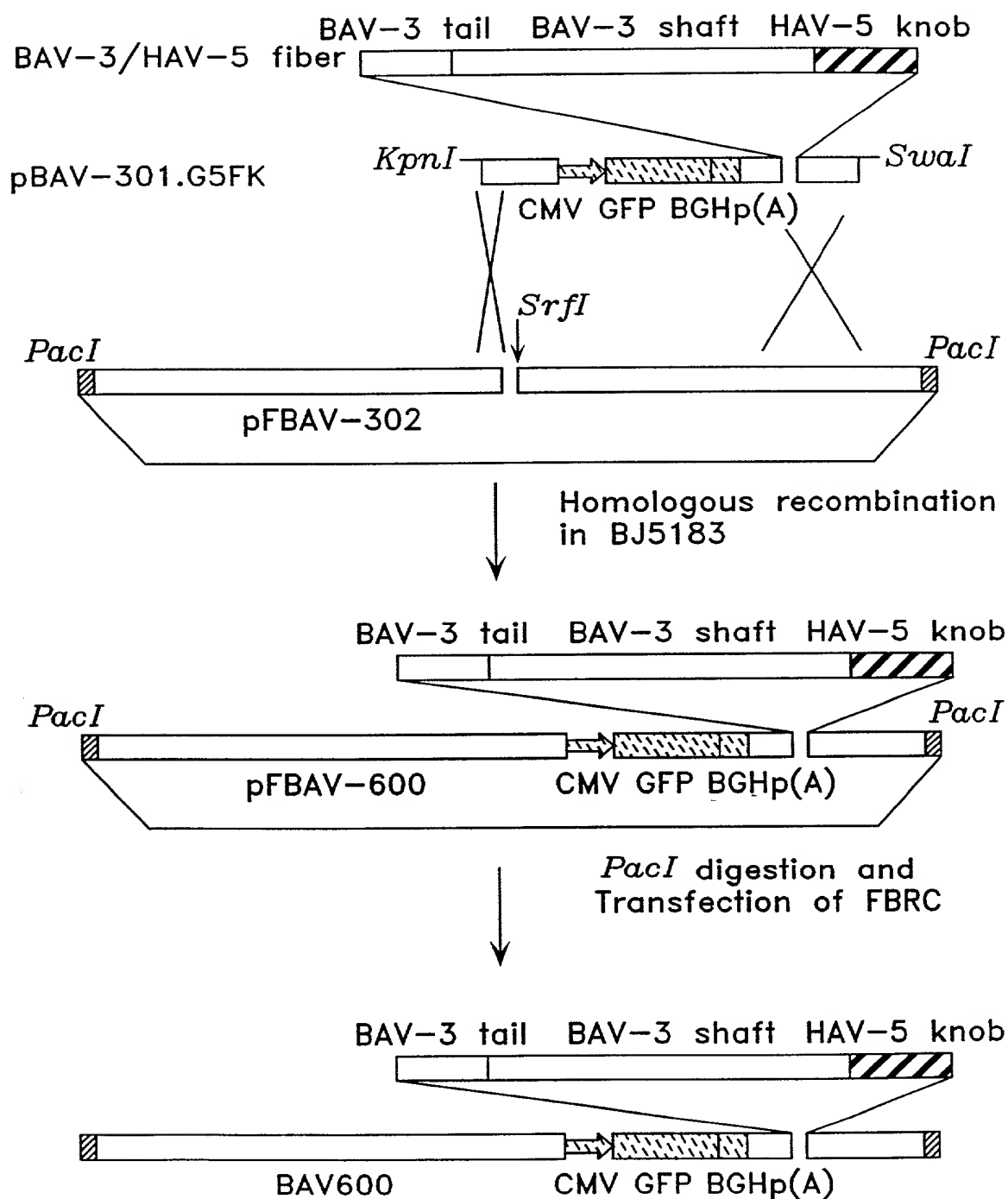


FIGURE 3

22/41

Characterization of BAV600

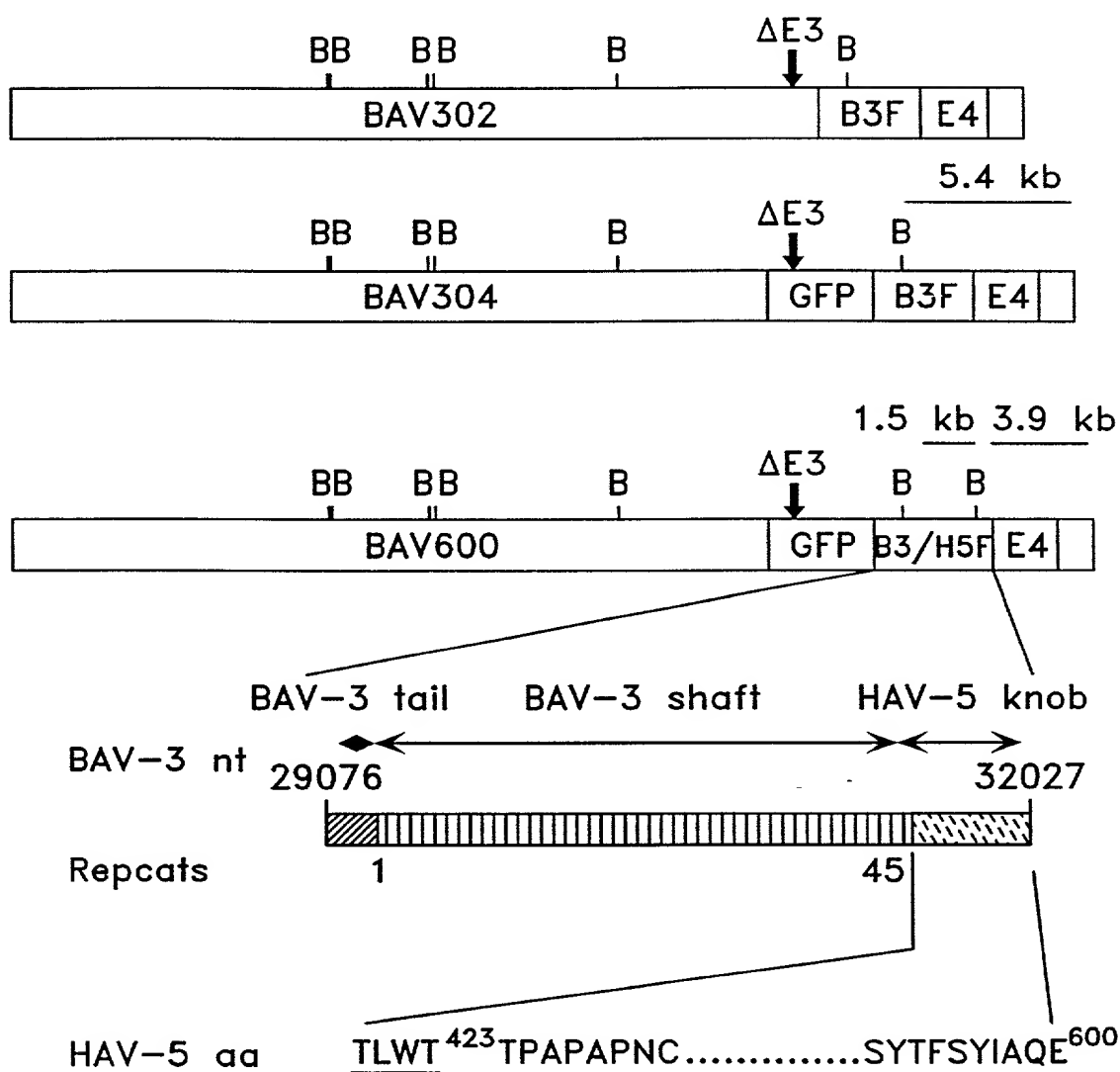
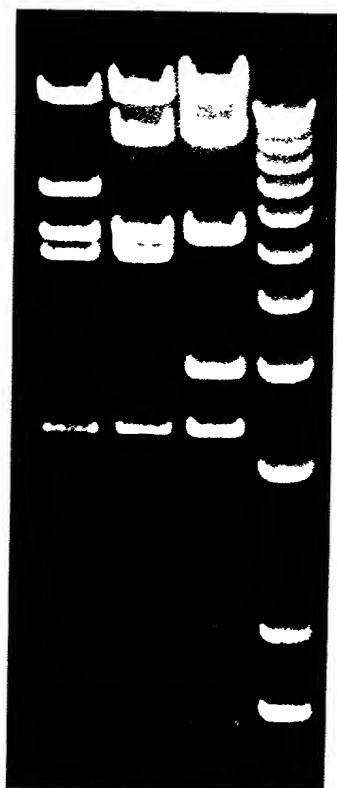


FIGURE 4

23/41

Analysis of BAV600 by Restriction Enzyme *Bgl* II Digestion

1 2 3



Lane 1. BAV302
2. BAV304
3. BAV600

1 2 3

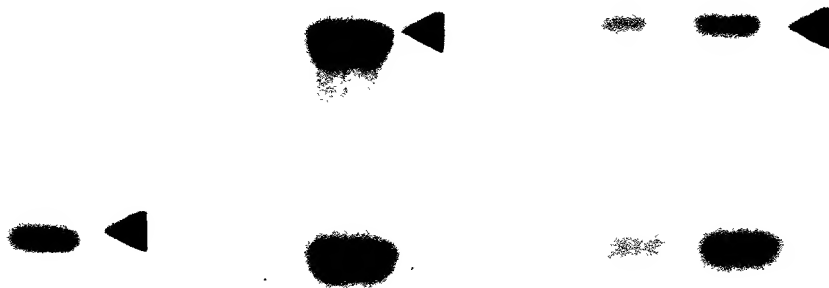
Figure 5A

Figure 5B

24/41

Expression of HAV-5 Fiber Knob by BAV600

Mab against HAV5 knob					Ab against BAV3 knob			
1	2	3	4	5	6	7	8	9



- Lane 1. Mock
- 2. HAV-5
- 3. BAV3
- 4. BAV304
- 5. BAV600
- 6. Mock
- 7. BAV3
- 8. BAV304
- 9. BAV600

Figure 6

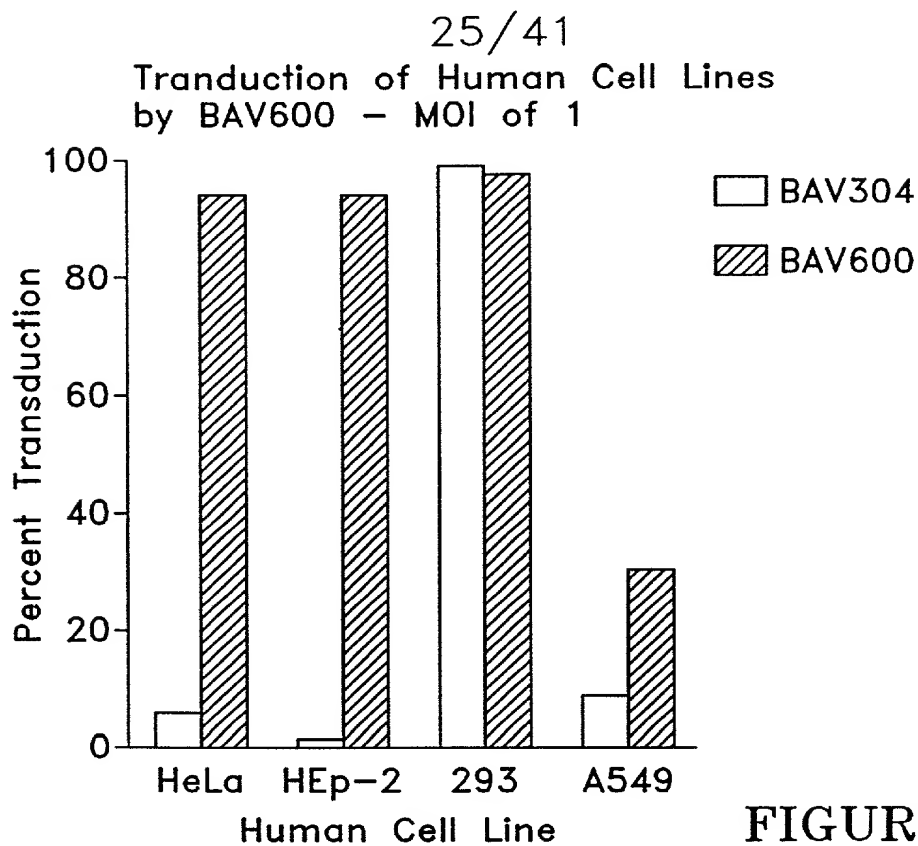


FIGURE 7A

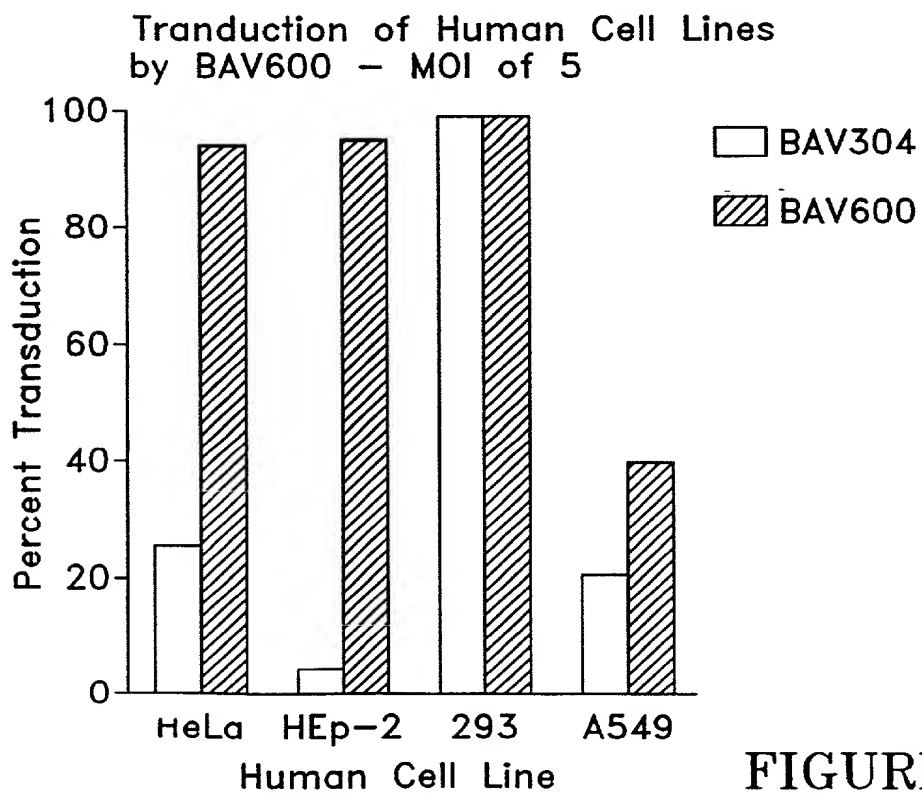


FIGURE 7B

FACS ANALYSIS OF BAV304 AND BAV600 TRANSDUCTION OF HUMAN CELLS

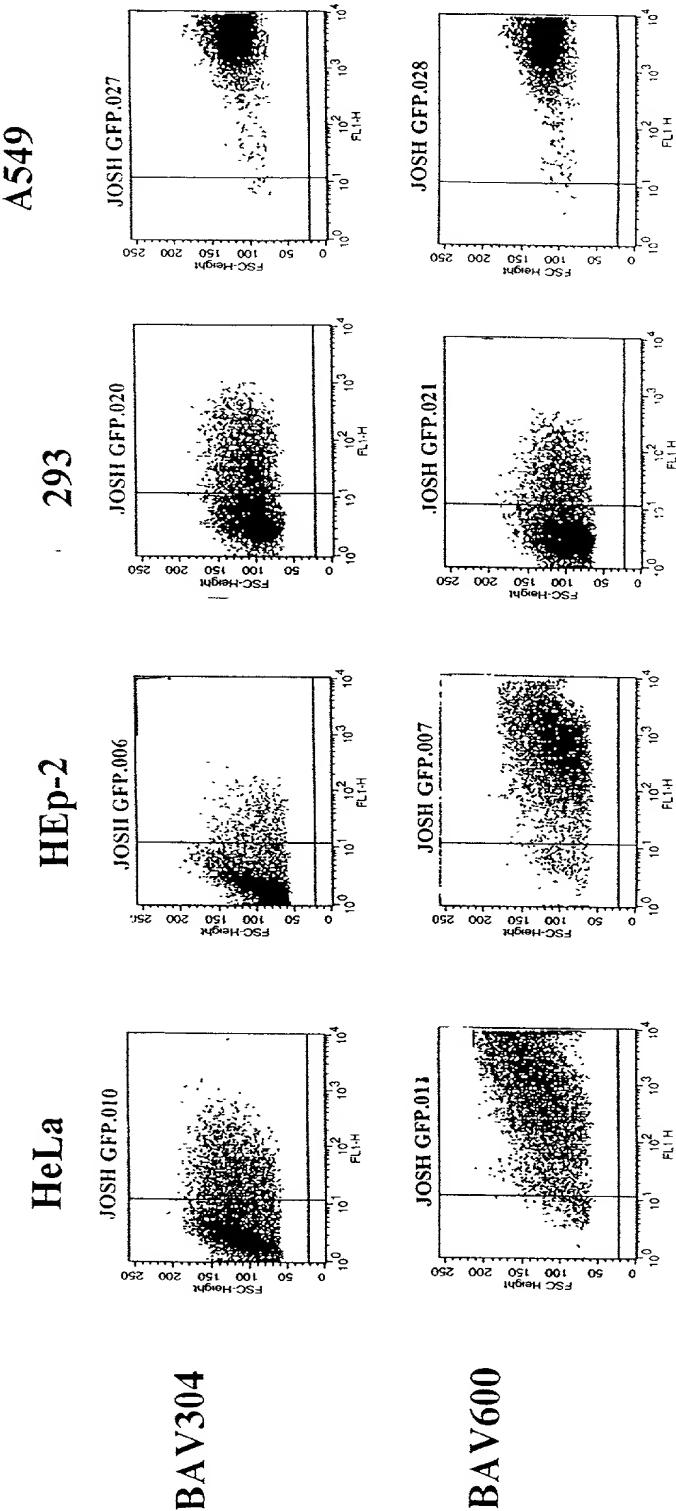


FIGURE 8

27/41

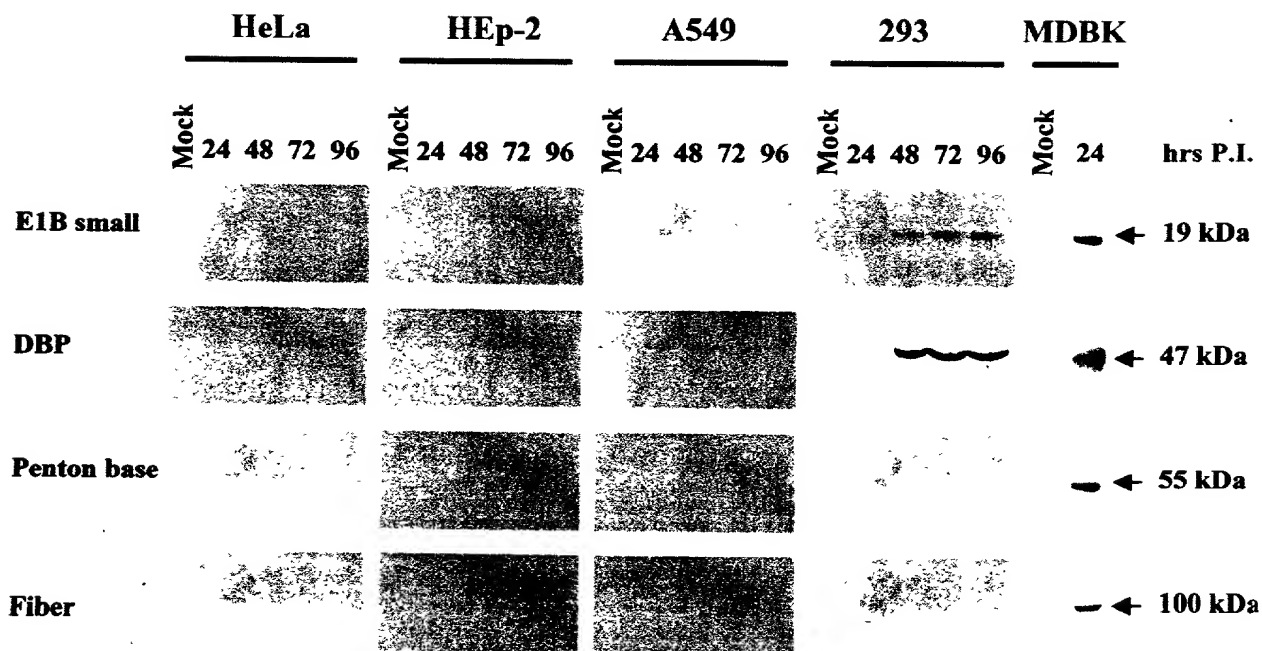


Figure 9

28/41

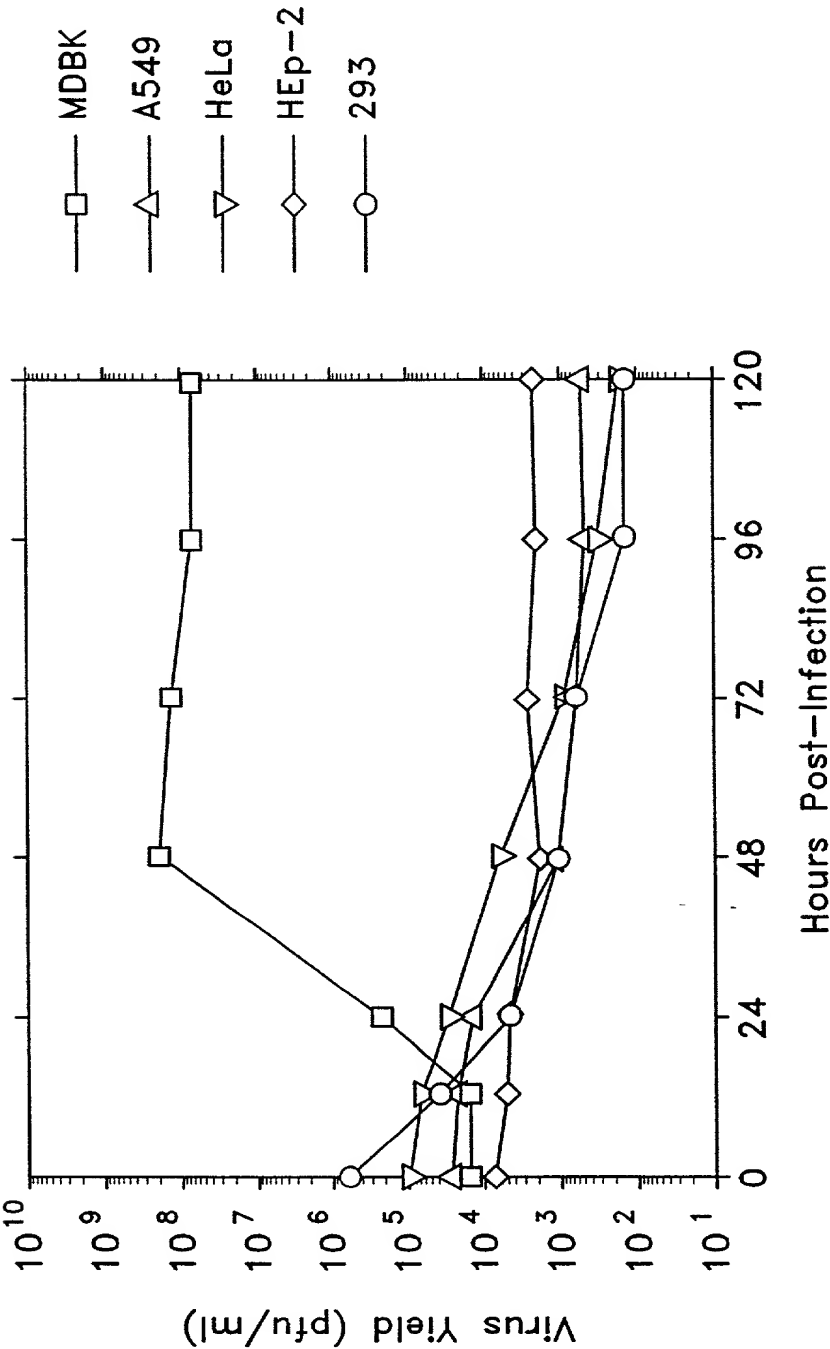


FIGURE 10

29/41

	Virus	
	BAV-3	BAV600
Normal Rabbit Serum	<1:50	<1:50
Rabbit Antiserum against BAV3 FK	1:800	<1:50
Monoclonal Ab against BHV gD (2C8)	<1:50	<1:50
Monoclonal Ab against HAd5 FK (1D6.14)	<1:50	1:3,200

FIGURE 11

30/41

FIGURE 12

10 20 30 40
MSVSSCSCPSAPTIFMLLOMKRARSEDTFNPVYPYDTET 40
GPPTVPFLTPPFVSPNGFOESP PGVLSRLSEPLVTSNGM 80
LALKMGNGLSLDEAGNLTSQNVTTVSPPLKKTKSNINLEI 120
SAPLTVTSEALTVAAAAPLMVAGNTLTMOSOAPLTVHDSK 160
LSIATOGPLTVSEGKLALOTSGPLTTTDSSTLTITASPPL 200
210 220 230 240
TTATGSLGIDLKEPIYTQNGKLGLKYGAPLHVTDDLNTLT 240
VATGPGVTINNTSLOTKVTGALGFDSQGNMQLNVAGGLRI 280
DSQNRRLILDVSYPFDAQNQLNRLGQGPLFINSAHNLDI 320
NYNKGLYLFTASNNSKKLEVNLSAKGLMFDATAIAINAG 360
DGLEFGSPNAPNTNPLKTKIGHGLEFDSNKAMVPKLG TGL 400
410 420 430 440
SFDSTGAITVGNKNNDKLT LWTPAPSPNCRLNAEKDAKL 440
TLVLTKCGSQILATVSVLAVKGS LAPISGTVQSAHLIIRF 480
DENGVL LNNSFLDPEYWNFRNGDLTEGTAYTNAVGFMPNL 520
SAYPKSHGKTAKSNIVSQVYLNGDKTKPVTLTITLNGTQE 560
TGDTPSAYSMSFSWDWSGHNYINEIFATSSYTFSYIAQE 600

31/41

FIGURE 13

10 20 30 40
MKRSVPODFNLVYPYKAKRPNIMPPFFDRNGFVENQEATL 40
AMLVEKPLTFDKEGALT LGVGRGIRINPAGLLETNDLASA 80
VFPPLASDEAGNVTLNMSDGLYTKDNKLAVKVGPGLSLDS 120
NNALQVHTGQGLTVTDDKVS LNTQAPLSTTSAGLSLLLGP 160
SLHLGEEERLTVNTGAGLOISNNALAVKVGSGITVDAQNO 200
210 220 230 240
LAASLGDGLES RDNKT VVKAGPGLTITNQALTVATGNGLQ 240
VNPEGOLQ LNI TAGQGLNFANNSLAVELGSGLHFPPGQNO 280
VSLYPGDGIDIRDNRVTVPAGPGLRMLNHQLAVASGDGLE 320
VHSDTLRLKLSHGLTFENGAVRAKLGPGGLGTDDSGRSVVR 360
TGRGLRVANGQVOIFSGRGTAIGTDSSLTLNIRAPLOFSG 400
410 420 430 440
PALTASLOGSGPITYNSNNGTFGLSIGPGMWVDQNRLOVN 440
PGAGLVFQGNLVPNLADPLAISDSKISLSLGPGLTQASN 480
ALTLSLGNGLFESNQAVAIKAGRGLRFESSQALESSLTV 520
GNGLTLTDTVIRPNLGDGLEVRDNKIIVKLGANLRFENGA 560
VTAGTVNPSAPEAPPTLTAEPLRASNSHLQLSLSEGLVV 600
610 620 630 640
HNNALALQLGDGMEVNOHGLTLRVGSGLQMRDGILTVTPS 640
GTPIEPRLTAPLTOTENGIGLALGAGLELDESALQVKVGP 680
GMRLNPVEKYVTLLLGPGLSFGQPANRTNYDVRVSVEPPM 720
VFGQRGQLTFLVGHGLHIQNSKLQLNLGQGLRTDPVTNQL 760
EVPLGQGLEIADESQVRVKLGDGLOFDSQARITTAPNMVT 800
810 820 830 840
ETLWTGTGSNANVTWRGYTAPGSKLFLSLTRFSTGLVLGN 840
MTIDSNASFGQYINAGHEQIECFILLDNQGNLKEGSNLOG 880
TWEVKNNP SASKAAFLPSTALYPILNESRGS LPGKNLVGM 920
QAILGGGGTCTVIATLNGRRSNYPAGOSIIFVWQEFNTI 960
AROPLNHSTLTFSYWT 976

32/41

FIGURE 14

10 20 30 40
MKRARWDPVYPFSEERLVPLPPF IEAGKGLKSEGL ILSLN 40
FTDPITINOTGFLT VKLGDGIF INGEGLSSTAPKVKVPL 80
TVSDETLQLLLSNSLT TESDSLALKOPQLPLK INDEGSLV 120
LNLNTPLNLQNERLSLNVSNPLK IAAADSLT INLKEPLGLO 160
NESLGLNLSDPMNITPEGNLGIKLNPMKVEESSLALNYK 200
210 220 230 240
NPLAISNDALSINIANPLTVNTSGSLGISYSTPLRISNNA 240
LSLFIGKPLGLGTDGSLTVNLTRPLVCRONTLAINYSAPL 280
VSLQDNLTLSYAQPLTVSDNSLRSLNSPLNTNSDGKLSV 320
NYSNPLVVTDSNLTLSVKKPVMINNTGNVDLSFTAPIKLN 360
DAEQLTLETTEPLEVADNALKLKLKGLTVSNNALTLNLG 400
410 420 430 440
NGLTFQOGLLQIKTNSSLGFNASGELSTATKQGTITVNFL 440
STTPIAFGWQI IPTTVAFIYILSGTQFTPOSPVTSLGFP 480
PQDFLDFFVLSPFVTSVTQIVGNDVKVIGLTISKNOSTIT 520
MKFTSPLAENVPVSMFTAHOFRQ. 544

33/41

FIGURE 15

10 20 30 40
MGPKKQKRELPEDFDPVYPYDVPQLQINPPFVSGDGFNQS 40
VDGVLSLHIAPPLVFDNTRALTAFGGGLQLSGKQLVVAT 80
EGSGLTTNPDGKLVKVKSPITLTAEGISLSLGPGLSNSE 120
TGLSLOVTAPLOFQGNALTPLAAGLONTDGGMGVKLGSG 160
LTTDNSOAVTVQVGNGLQNGEGOLTVPATAPLVSGSAGI 200
210 220 230 240
SFNYSSNDFVLNDLSLRLPKAISVTPPLOSTEDTISLNY 240
SNDFSVDNALTLAPTFKPYTLWTGASPTANVILTNTTTP 280
NGTFFLCLTRVGGLVLGSFALKSSIDLTSMKKVNFIFDG 320
AGRLOSDSTYKGRFGFRSNDSVIEPTAAGLSPAWLMPSTF 360
IYPRNTSGSSLTSFVYINQTYVHVDIKVNTLSTNGYSLEF 400
410 420 430 440
NFQNMFSAPFSTSYGTFCYVPRRTTHRPRHGPFSLRERR 440
HLFQLLQQ 448

34/41

FIGURE 16

10 20 30 40
MKRTRRALPANYDPVYPYDAPGSSTQPPFFNNKQGLTESP 40
PGTLAVNVSPPLTFSTLGAIKLSTGPGLTLNEGKLOASLG 80
PGLITNTEGOITVENVNKVLSTSPHLKNENTVSLALGDG 120
LEDENGTLKVTFTPTPPPPLQFSPPLTKTGGTVSLPLODSM 160
QVTNGKLGVKPTTYAPPLKKTDDQVSLQVGSGLTVINEQL 200
210 220 230 240
QAVOPPATTYNEPLSKTDNSVSLQVGAGLAVQSGALVATP 240
PPPLTFTSPLEKNENTVSLQVGAGLSVQNNALVATPPPPL 280
TFAYPLVKNDNHVALSAGSGLRISGGSLTVATGPGLSHQN 320
GTIGAVVGAGLKFENNAI LAKLGNGLTIRDGAIEATOPPA 360
APITLWTGPGPSINGFINDTPVIRCFICLTRDSNLVTVNA 400
410 420 430 440
SFVGEGGYRIVSPTQSQFSLIMEFDQFGOLMSTGNINSTT 440
TWGEKPWGNNTVQPRPSHTWKLCMPNREVYSTPAATISRC 480
GLDSIAVDGAPSRSIDCMLIINKPKGVATYTLTFRFLNFN 520
RLSGGTLFKTDVLTFTYVGENQ 542

35/41

FIGURE 17A

M K R S R X X X P X P X D P X X L Y P X P X X X P Q X D X F Majority																															
10										20										30											
1	M	S	V	S	S	C	S	C	P	S	A	P	T	I	F	M	L	L	Q	M	K	R	A	R	P	S	E	D	T	F	HAd5F.PRO
1	M	K	R	S	V	P	Q	D	F	N	L	V	P	Y	K	A	K	R	P	N	I	M	P	P	F	F	D	R	N	BAV3F.pro	
1	M	G	P	K	K	Q	K	R	E	L	P	E	D	F	D	P	V	Y	P	Y	D	V	P	Q	L	Q	I	N	P	P	PAV3F.pro
1	M	K	R	T	R	R	A	L	P	A	N	Y	D	P	V	Y	P	Y	D	A	P	G	S	S	T	Q	P	P	F	F	CAV2F.pro
1	M	K	R	A	R	W	D	P	V	Y	P	F	S	E	E	R	L	V	P	L	P	P	F	I	E	A	G	K	G	L	OAd287.PRO
N X V G X X X X X X X X X V X X X L T P P F L X X X L G X X Majority																															
40										50										60											
31	N	P	V	Y	P	Y	D	T	E	T	G	P	P	T	V	P	F	L	T	P	P	F	V	S	P	N	G	F	Q	E	HAd5F.PRO
31	G	F	V	E	N	Q	E	A	T	L	A	M	L	V	E	K	P	L	T	F	D	K	E	G	A	L	T	L	G	V	BAV3F.pro
31	F	V	S	G	D	G	F	N	Q	S	V	D	G	V	L	S	L	H	I	A	P	P	L	V	F	D	N	T	R	A	PAV3F.pro
31	N	N	K	Q	G	L	T	E	S	P	P	G	T	L	A	V	N	V	S	P	P	L	T	F	S	T	L	G	A	I	CAV2F.pro
31	K	S	E	G	L	I	L	S	L	N	F	T	D	P	I	T	I	N	Q	T	G	F	L	T	V	K	L	G	D	G	OAd287.PRO
X X X X G X G G L L L E G K X X X V X X X G L X L T T X L X Majority																															
70										80										90											
61	S	P	P	G	V	L	S	L	R	L	S	E	P	L	V	T	S	N	G	M	L	A	L	K	M	G	N	G	L	S	HAd5F.PRO
61	G	R	G	I	R	I	N	P	A	G	L	L	E	T	N	D	L	A	S	A	V	F	P	P	L	A	S	D	E	A	BAV3F.pro
61	L	T	L	A	F	G	G	G	L	Q	L	S	G	K	Q	L	V	V	A	T	E	G	S	G	L	T	T	N	P	D	PAV3F.pro
61	K	L	S	T	G	P	G	L	T	L	N	E	G	K	L	Q	A	S	L	G	P	G	L	I	T	N	T	E	G	Q	CAV2F.pro
61	I	F	I	N	G	E	G	G	L	S	S	T	A	P	K	V	K	V	P	L	T	V	S	D	E	T	L	Q	L	L	OAd287.PRO
G X V X L N X K S X S X T T X X P X L X K T G S G L S L D X Majority																															
100										110										120											
91	L	D	E	A	G	N	L	T	S	Q	N	V	T	T	V	S	P	P	L	K	K	T	K	S	N	I	N	L	E	I	HAd5F.PRO
91	G	N	V	T	L	N	M	S	D	G	L	Y	T	K	D	N	K	L	A	V	K	V	G	P	G	L	S	L	D	S	BAV3F.pro
91	G	K	L	V	L	K	V	K	S	P	I	T	L	T	A	E	G	I	S	L	S	L	G	P	G	L	S	N	S	E	PAV3F.pro
91	I	T	V	E	N	V	N	K	V	L	S	F	T	S	P	L	H	K	N	E	N	T	V	S	L	A	L	G	D	G	CAV2F.pro
91	L	S	N	S	L	T	T	E	S	D	S	L	A	L	K	Q	P	Q	L	P	L	K	I	N	D	E	G	S	L	V	OAd287.PRO
L N L L T V T T X X L X X X X X A P L X P L X X A L X S T T Majority																															
130										140										150											
121	S	A	P	L	T	V	T	S	E	A	L	T	V	A	A	A	A	P	L	M	V	A	G	N	T	L	T	M	Q	S	HAd5F.PRO
121	N	N	A	L	Q	V	H	T	G	D	G	L	T	V	T	D	D	K	V	S	L	N	T	Q	A	P	L	S	T	T	BAV3F.pro
121	T	G	L	S	L	Q	V	T	A	P	L	Q	F	Q	G	N	A	L	T	L	P	L	A	A	G	L	Q	N	T	D	PAV3F.pro
121	L	E	D	E	N	G	T	L	K	V	T	F	P	T	P	P	P	L	Q	F	S	P	P	L	T	K	T	G	G	CAV2F.pro	
121	L	N	L	N	T	P	L	N	L	O	N	E	R	L	S	L	N	V	S	N	P	L	K	I	A	A	D	S	L	T	OAd287.PRO

36/41

FIGURE 17B

X A X L X L L G S X L X T L G X X X V T V X N G X P X L Q X																												Majority			
160														170														180			
151	Q	A	P	L	T	V	H	D	S	K	L	S	I	A	T	Q	G	P	L	T	V	S	E	G	K	L	A	L	Q	T	HAd5F.PRO
151	S	A	G	L	S	L	L	L	G	P	S	L	H	L	G	E	E	R	L	T	V	N	T	G	A	G	L	Q	I	BAV3F.pro	
151	G	G	M	G	V	K	L	G	S	G	L	T	T	D	N	S	Q	A	V	T	V	Q	V	G	N	G	L	Q	L	N	PAV3F.pro
151	T	V	S	L	P	L	Q	D	S	M	Q	V	T	N	G	K	L	G	V	K	P	T	T	Y	A	P	P	L	K	K	CAV2F.pro
151	I	N	L	K	E	P	L	G	L	Q	N	E	S	L	G	L	N	L	S	D	P	M	N	I	T	P	E	G	N	L	OAd287.PRO
G X X L L T V X V G S G L T V A S X X L X A A X X S N G X X																												Majority			
190														200														210			
181	S	G	P	L	T	T	D	S	S	T	L	T	I	T	A	S	P	P	L	T	T	A	T	G	S	L	G	I	D	HAd5F.PRO	
181	S	N	N	A	L	A	V	K	V	G	S	G	I	T	V	D	A	Q	N	Q	L	A	A	S	L	G	D	G	L	E	BAV3F.pro
181	G	E	G	Q	L	T	V	P	A	T	A	P	L	V	S	G	S	A	G	I	S	F	N	Y	S	S	N	D	F	V	PAV3F.pro
181	T	D	Q	Q	V	S	L	Q	V	G	S	G	L	T	V	I	N	E	Q	L	Q	A	V	Q	P	P	A	T	T	Y	CAV2F.pro
181	G	I	K	L	K	N	P	M	K	V	E	E	S	S	L	A	L	N	Y	K	N	P	L	A	I	S	N	D	A	L	OAd287.PRO
L X N X S X T L N X K X G L V X G X L A S T X D T L S X L X																												Majority			
220														230														240			
211	L	K	E	P	I	Y	T	Q	N	G	K	L	G	L	K	Y	G	A	P	L	H	V	T	D	D	L	N	T	L	T	HAd5F.PRO
211	S	R	D	N	K	T	V	V	K	A	G	P	G	L	T	I	T	N	Q	A	L	T	V	A	T	G	N	G	L	Q	BAV3F.pro
211	L	D	N	D	S	L	S	L	R	P	K	A	I	S	V	T	P	P	L	Q	S	T	E	D	T	I	S	L	N	Y	PAV3F.pro
211	N	E	P	L	S	K	T	D	N	S	V	S	L	Q	V	G	A	G	L	A	V	Q	S	G	A	L	V	A	T	P	CAV2F.pro
211	S	I	N	I	A	N	P	L	T	V	N	T	S	G	S	L	G	I	S	Y	S	T	P	L	R	I	S	N	N	A	OAd287.PRO
V N P F X G X X L N L T X X Q T L X X X X L X X L V X X N N																												Majority			
250														260														270			
241	V	A	T	G	P	G	V	T	I	N	N	T	S	L	Q	T	K	V	T	G	A	L	G	F	D	S	Q	G	N	M	HAd5F.PRO
241	V	N	P	E	G	Q	L	Q	L	N	I	T	A	G	Q	G	L	N	F	A	N	N	S	L	A	V	E	L	G	S	BAV3F.pro
241	S	N	D	F	S	V	D	N	G	A	L	T	L	A	P	T	F	K	P	Y	T	L	W	T	G	A	S	P	T	A	PAV3F.pro
241	P	P	P	L	T	F	T	S	P	L	E	K	N	E	N	T	V	S	L	Q	V	G	A	G	L	S	V	Q	N	N	CAV2F.pro
241	L	S	L	F	I	G	K	P	L	G	L	G	T	D	G	S	L	T	V	N	L	T	R	P	L	V	C	R	Q	N	OAd287.PRO
X L X X T P G X P L V S L Y P L L X L D V X X P L X A S X A																												Majority			
280														290														300			
271	Q	L	N	V	A	G	G	L	R	I	D	S	Q	N	R	R	L	I	L	D	V	S	Y	P	F	D	A	Q	N	Q	HAd5F.PRO
271	G	L	H	F	P	P	G	Q	N	Q	V	S	L	Y	P	G	D	G	I	D	I	R	D	N	R	V	T	V	P	A	BAV3F.pro
271	N	V	I	L	T	N	T	T	T	P	N	G	T	F	F	L	C	L	T	R	V	G	G	L	V	L	G	S	F	A	PAV3F.pro
271	A	L	V	A	T	P	P	P	L	T	F	A	Y	P	L	V	K	N	D	N	H	V	A	L	S	A	G	S	G	CAV2F.pro	
271	T	L	A	I	N	Y	S	A	P	L	V	S	L	Q	D	N	L	T	L	S	Y	A	Q	P	L	T	V	S	D	N	OAd287.PRO

37/41

FIGURE 17C

L X X L X G L X P L X T N S X G X L D X N Y S X X L V L T X Majority																															
310															320										330						
301	L	N	L	R	L	G	Q	G	P	L	F	I	N	S	A	H	N	L	D	I	N	Y	N	K	G	L	Y	L	F	T	HAd5F.PRO
301	G	P	G	L	R	M	L	N	H	Q	L	A	V	A	S	G	D	G	L	E	V	H	S	D	T	L	R	L	K	L	BAV3F.pro
301	L	K	S	S	I	D	L	T	S	M	T	K	K	V	N	F	I	F	D	G	A	G	R	L	Q	S	D	S	T	Y	PAV3F.pro
301	L	R	I	S	G	G	S	L	T	V	A	T	G	P	G	L	S	H	Q	N	G	T	I	G	A	V	V	G	A	G	CAV2F.pro
301	S	L	R	L	S	L	N	S	P	L	N	T	N	S	D	G	K	L	S	V	N	Y	S	N	P	L	V	V	T	D	OAd287.PRO
S X X X X F X X X A V L I N X T G X X D X A X X A X I X X X Majority																															
340															350										360						
331	A	S	N	N	S	K	K	L	E	V	N	L	S	T	A	K	G	L	M	F	D	A	T	A	I	A	I	N	A	G	HAd5F.PRO
331	S	H	G	L	T	F	E	N	G	A	V	R	A	K	L	G	P	G	L	G	T	D	D	S	G	R	S	V	V	R	BAV3F.pro
331	K	G	R	F	G	F	R	S	N	D	S	V	I	E	P	T	A	A	G	L	S	P	A	W	L	M	P	S	T	F	PAV3F.pro
331	L	K	F	E	N	N	A	I	L	A	K	L	G	N	G	L	T	I	R	D	G	A	I	E	A	T	Q	P	P	A	CAV2F.pro
331	S	N	L	T	L	S	V	K	K	P	V	M	I	N	N	T	G	N	V	D	L	S	F	T	A	P	I	K	L	N	OAd287.PRO
D G X X L T S G N G P X X N V X I N X T X V G L D F X L T T Majority																															
370															380										390						
361	D	G	L	E	F	G	S	P	N	A	P	N	T	N	P	L	K	T	K	I	G	H	G	L	E	F	D	S	N	K	HAd5F.PRO
361	T	G	R	G	L	R	V	A	N	G	Q	V	Q	I	F	S	G	R	G	T	A	I	G	T	D	S	S	L	T	L	BAV3F.pro
361	I	Y	P	R	N	T	S	G	S	S	L	T	S	F	V	Y	I	N	Q	T	Y	V	H	V	D	I	K	V	N	T	PAV3F.pro
361	A	P	I	T	L	W	T	G	P	G	P	S	I	N	G	F	I	N	D	T	P	V	I	R	C	F	I	C	L	T	CAV2F.pro
361	D	A	E	Q	L	T	L	E	T	T	E	P	L	E	V	A	D	N	A	L	K	L	K	L	G	K	G	L	T	V	OAd287.PRO
X X X A L L X X X G S F L T X G X X X X G S K T N S S L X L Majority																															
400															410										420						
391	A	M	V	P	K	L	G	T	G	L	S	F	D	S	T	G	A	I	T	V	G	N	K	N	N	D	K	L	T	L	HAd5F.PRO
391	N	I	R	A	P	L	Q	F	S	G	P	A	L	T	A	S	L	Q	G	S	G	P	I	T	Y	N	S	N	N	G	BAV3F.pro
391	L	S	T	N	G	Y	S	L	E	F	N	F	Q	N	M	S	F	S	A	P	F	S	T	S	Y	G	T	F	C	Y	PAV3F.pro
391	R	D	S	N	L	V	T	V	N	A	S	F	V	G	E	G	Y	R	I	V	S	P	T	Q	S	Q	F	S	L	CAV2F.pro	
391	S	N	N	A	L	T	L	N	L	G	N	G	L	T	F	Q	Q	G	L	L	Q	I	K	T	N	S	S	L	G	F	OAd287.PRO
X X X X X X S P X X X X X N X X X X L T L X X L X F G X N Majority																															
430															440										450						
421	W	T	T	P	A	P	S	P	N	C	R	L	N	A	E	K	D	A	K	L	T	L	V	L	T	K	C	G	S	Q	HAd5F.PRO
421	T	F	G	L	S	I	G	P	G	M	W	V	D	Q	N	R	L	Q	V	N	P	G	A	G	L	V	F	Q	G	N	BAV3F.pro
421	V	P	R	R	T	T	H	R	P	R	H	G	P	F	S	L	R	E	R	R	H	L	F	Q	L	L	Q	Q			PAV3F.pro
421	I	M	E	F	D	Q	F	G	Q	L	M	S	T	G	N	I	N	S	T	T	T	W	G	E	K	P	W	G	N	N	CAV2F.pro
421	N	A	S	G	E	L	S	T	A	T	K	Q	G	T	I	T	V	N	F	L	S	T	T	P	I	A	F	G	W	Q	OAd287.PRO

FIGURE 17 D

	I L X T X X A X X X K L S X X X I S X X S X P A X L I X R X	Majority
	460 470 480	
451	I L A T V S V L A V K G S L A P I S G T V Q S A H L I I R F	HAd5F.PRO
451	N L V P N L A D P L A I S D S K I S L S L G P G L T Q A S N	BAV3F.pro
448		PAV3F.pro
451	T V Q P R P S H T W K L C M P N R E V Y S T P A A T I S R C	CAV2F.pro
451	I I P T T V A F I Y I L S G T Q F T P Q S P V T S L G F Q P	OAd287.PRO
	X L D X X L X N G L X X X X X X V X X I X G X X X X V X X Y	Majority
	490 500 510	
481	D E N G V L L N N S F L D P E Y W N F R N G D L T E G T A Y	HAd5F.PRO
481	A L T L S L G N G L E F S N Q A V A I K A G R G L R F E S S	BAV3F.pro
448		PAV3F.pro
481	G L D S I A V D G A P S R S I D C M L I I N K P K G V A T Y	CAV2F.pro
481	P Q D F L D F F V L S P F V T S V T Q I V G N D V K V I G L	OAd287.PRO
	T X A X X F S X X X X X X X X X L X K T X X X N X X X X X E	Majority
	520 530 540	
511	T N A V G F M P N L S A Y P K S H G K T A K S N I V S Q V Y	HAd5F.PRO
511	S Q A L E S S L T V G N G L T L T D T V I R P N L G D G L E	BAV3F.pro
448		PAV3F.pro
511	T L T F R F L N F N R L S G G T L F K T D V L T F T Y V G E	CAV2F.pro
511	T I S K N Q S T I T M K F T S P L A E N V P V S M F T A H Q	OAd287.PRO
	X R - - - - -	Majority
	550 560 570	
541	L N G D K T K P V T L T I T L N G T Q E T G D T T P S A Y S	HAd5F.PRO
541	V R D N K I I V K L G A N L R F E N G A V T A G T V N P S A	BAV3F.pro
448		PAV3F.pro
541	N Q	CAV2F.pro
541	F R Q	OAd287.PRO
	- - - - -	Majority
	580 590 600	
571	M S F S W D W S G H N Y I N E I F A T S S Y T F S Y I A Q E	HAd5F.PRO
571	P E A P P T L T A E P P L R A S N S H L Q L S L S E G L V V	BAV3F.pro
448		PAV3F.pro
542		CAV2F.pro
544		OAd287.PRO

39/41

FIGURE 17E

		Majority
		610 620 630
600		HAd5F.PRO
601	H N N A L A L Q L G D G M E V N Q H G L T L R V G S G L Q M	BAV3F.pro
448		PAV3F.pro
542		CAV2F.pro
544		OAd287.PRO
		Majority
		640 650 660
600		HAd5F.PRO
631	R D G I L T V T P S G T P I E P R L T A P L T Q T E N G I G	BAV3F.pro
448		PAV3F.pro
542		CAV2F.pro
544		OAd287.PRO
		Majority
		670 680 690
600		HAd5F.PRO
661	L A L G A G L E L D E S A L Q V K V G P G M R L N P V E K Y	BAV3F.pro
448		PAV3F.pro
542		CAV2F.pro
544		OAd287.PRO
		Majority
		700 710 720
600		HAd5F.PRO
691	V T L L L G P G L S F G Q P A N R T N Y D V R V S V E P P M	BAV3F.pro
448		PAV3F.pro
542		CAV2F.pro
544		OAd287.PRO
		Majority
		730 740 750
600		HAd5F.PRO
721	V F G Q R G Q L T F L V G H G L H I Q N S K L Q L N L G Q G	BAV3F.pro
448		PAV3F.pro
542		CAV2F.pro
544		OAd287.PRO

40/41

FIGURE 17F

